

THE **HILL** **STANDARD** LINE
PLAYGROUND EQUIPMENT

HILL-STANDARD

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Mike Jackson, FAIA

THE FUN FUL LINE PLAYGROUND EQUIPMENT

Catalog No. 13



THIS GOLD MEDAL was awarded to the Hill-Standard Co., by the Brazilian Centennial Exposition at Rio de Janeiro, 1922-1923, because of the superiority of the Fun-Ful line of playground equipment.

FUN-FUL PLAYGROUND EQUIPMENT is the product of over thirty-one years' experience of the Hill-Standard Co., devoted exclusively to the development and manufacture of children's outdoor, health-building goods.

The receipt of a **GOLD MEDAL** in competition with products of the world, is an event out of the ordinary, and a fitting tribute to a sincere and honest effort, during a long period of years, to produce the **BEST** for the purpose intended.

HILL-STANDARD Co.

GENERAL OFFICE
ANDERSON, IND.

FACTORIES
ANDERSON, INDIANA
KOKOMO, INDIANA

Selling Agents throughout U. S. A., England, Canada, Mexico,
Honolulu, T. H., Cuba, Philippine Islands and The Argentine.

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ANDERSON PLANT

Our Guarantee

WE guarantee that the goods shown in this catalog are exactly as described and illustrated. We guarantee each new piece manufactured by us to be free from defects in material and workmanship under normal use and service. Our obligation under this is limited to making good at our factory any piece or part thereof which shall within ninety days after delivery to purchaser be returned to us with transportation charges prepaid, and which our examination shall disclose to our satisfaction to have been defective. This guarantee is in lieu of all other obligations or liabilities on our part, and we do not authorize any person or company to assume for us any other liability in connection with the sale of our goods.

This guarantee does not apply to goods that have been altered or repaired outside our factory, or to goods that are not properly installed or not used for the purpose intended.



KOKOMO PLANT



HUGH HILL

President and Founder

Hill-Standard Co.



To Our Friends and Customers

IT is with considerable pleasure and much pride that we present this catalog covering our Fun-Ful Public Playground Equipment Line.

For thirty-one years we have devoted our efforts and resources to the creation, development and manufacture of outdoor, health building play goods. The control and management of this company have been under one and the same head during this time.

Besides the goods shown in this book we manufacture a complete line of Home Yard Play Goods, covered by a special booklet which will be sent on request.

Those interested in either indoor or outdoor swimming pools should have our catalog covering sports apparatus for such public or private recreation places. Sending this beautiful catalog will be our pleasure. We conduct the largest business of its kind, being represented by over three hundred agents throughout this country and abroad. Two large factories are operated for the manufacture of these products.

Those desirous of knowing more about our financial responsibility are asked to consult Bradstreet or Dun, or any of our local banks.

The best engineering practice has been followed in the design and construction of our apparatus; the workmanship and finish are of a higher order than is generally expected of such goods.

Play apparatus here shown is used by the United States Government juvenile institutions and approved by the majority of state and county officials as well as leading park and recreation authorities.

We do not offer new, untried or unknown goods or materials—only those that are known to be absolutely **SAFE TO USE**. Not only are these goods safe and sound and honestly made, but we strive continuously to improve and to make them more attractive.

One of the outstanding features of our equipment is—**CAPACITY**; in other words, Fun-Ful Equipment will serve safely a greater number in less time and at lowest cost per capita.

In this book we illustrate and describe the greatest line of public playground equipment manufactured by one company. This gives the customer the widest possible selection of standard, approved goods.

SHIPPING, ASSEMBLAGE, INSTALLATION: Freight rates on apparatus proper are higher than on pipe and it is a saving to the customer to have apparatus and pipe billed separately on those outfits requiring both; otherwise, he would be compelled to pay the higher rate on the whole shipment. From the blue prints furnished, assemblage on the ground is a simple matter. With a level, spade and wrench, almost any laborer can install the equipment.

See page sixty-three for material and labor required for the installation of the different numbers.

PRICES: Prices are as low as is consistent with first-class material, service and workmanship. They are subject to change without notice and are quoted F. O. B. cars, Kokomo, Indiana.

WEIGHTS: Shipping weights may vary slightly.

CLAIMS: We positively will not allow return of any goods without our written consent. Claims for shortages or damages not allowed unless made within 90 days after receipt of goods.

ORDERS: Orders are subject to the acceptance of the home office. They should be written clearly, always using catalog numbers for both apparatus and pipe. Slide chutes furnished with either Armco galvanized iron or hard wood bed ways, at no difference in price. We reserve the right to ship either type when not specified. **STATE TYPE DESIRED.** The choice of two types of fly ladders for our Giant Stride is offered at no difference in price. **STATE TYPE DESIRED.**

RESPONSIBILITY: Our responsibility ceases upon delivery of goods to transportation company.



Cycle Stride

SEVERAL years ago this unusual piece of play apparatus was introduced, it being greeted nationally with an enthusiastic acceptance.

It is of unique design and an asset to any playground. The majority of the leading playgrounds in the country include this as one of the standard numbers.

The reception accorded this Cycle Stride has been nothing short of marvelous, public paeans of congratulations having been received.

The large overhead wheel revolves on a slightly inclined axis, producing an undulating wave-like motion that is different, exhilarating and fascinating.

The apparatus is substantially constructed of steel and

malleable iron with the center support set four feet in concrete.

Only a minimum amount of attention is required. Muscle developing, health building and pleasure providing, this is indeed a number worth the serious consideration of all playground and park authorities.

Two types of fly ladders, i. e., rope with wood rungs and chain with steel tube rungs, are furnished at no difference in price. Customer should state choice in ordering.

Capacity—8 children at a time.

Height over all—12 feet; extreme width 10 feet. Ground space required for safe operation 40 feet in diameter.

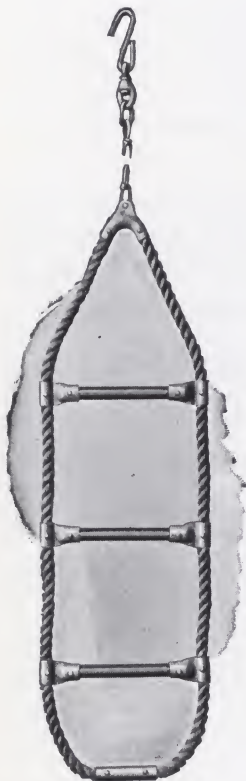
No. 227—Code—LIZAY—Complete with pipe as shown, weight about.....580 lbs.

*See Price List and Discount for Catalog No. 13
See page 63 for installation requirements*

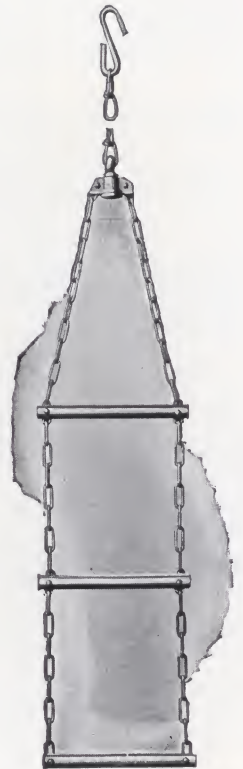


Ball Bearing Giant Stride Head

TWO large self-contained ball bearings carry the revolving head and load, operating submerged in oil and encased and protected against dust, dirt and the elements. Self-contained bearings maintain their alignments; disarrangement and lost balls are unknown. Oil case contains less than a pint and is filled after head is mounted through screw plug hole in top. One filling a year is sufficient. This design follows best modern engineering practice. Customer receives head completely assembled and ready to mount; all heads drilled for eight fly ladders; six, however, may be used. We recommend eight for greater capacity and better balance. Two types of fly ladders are offered at no difference in cost. See illustrations at right and left. Each type has its particular advantage. The chain and tube rung type, slightly heavier but much stronger is not so susceptible to vandalism, and is best for unpoliced playgrounds. Rope and wood rung type is less noisy; is lighter in weight and of a softer, more pliable nature; is less likely to cause injury. Please state choice when ordering. Either type is swung from the revolving head by heavy galvanized steel chain with swivel.



Rope and Wood Rung
Fly Ladder



Chain and Tube Rung
Fly Ladder

See Price List and Discount for Catalog No. 13
See page 37 for Swimming Pool Equipment



Ball Bearing Giant Stride

THIS incomparable device is a model we have manufactured in large quantities for many years and of the thousands in use not one has ever been reported as being unsatisfactory.

We offer this with the utmost assurance that it is the very best Giant Stride the market affords; one of the outstanding types of play apparatus, being looked upon as necessary to a modern playground.

The large, umbrella like head carries the chains and ladders out and away from the support column, creating less noise and preventing entanglements.

With the large ball bearing head, strong galvanized chains and well designed flying ladders, all supported

by a 4-inch steel pipe, a Giant Stride that is truly superior is our boast.

The space required for safe and satisfactory use should not be less than forty feet in diameter.

We suggest, as a means of keeping down noise created by the chains and ladders striking the pipe, that the hollow section be filled with sand.

Height over all, 14 feet; support pipe imbedded 4 feet in concrete.

Two workmen should make installation in five hours.

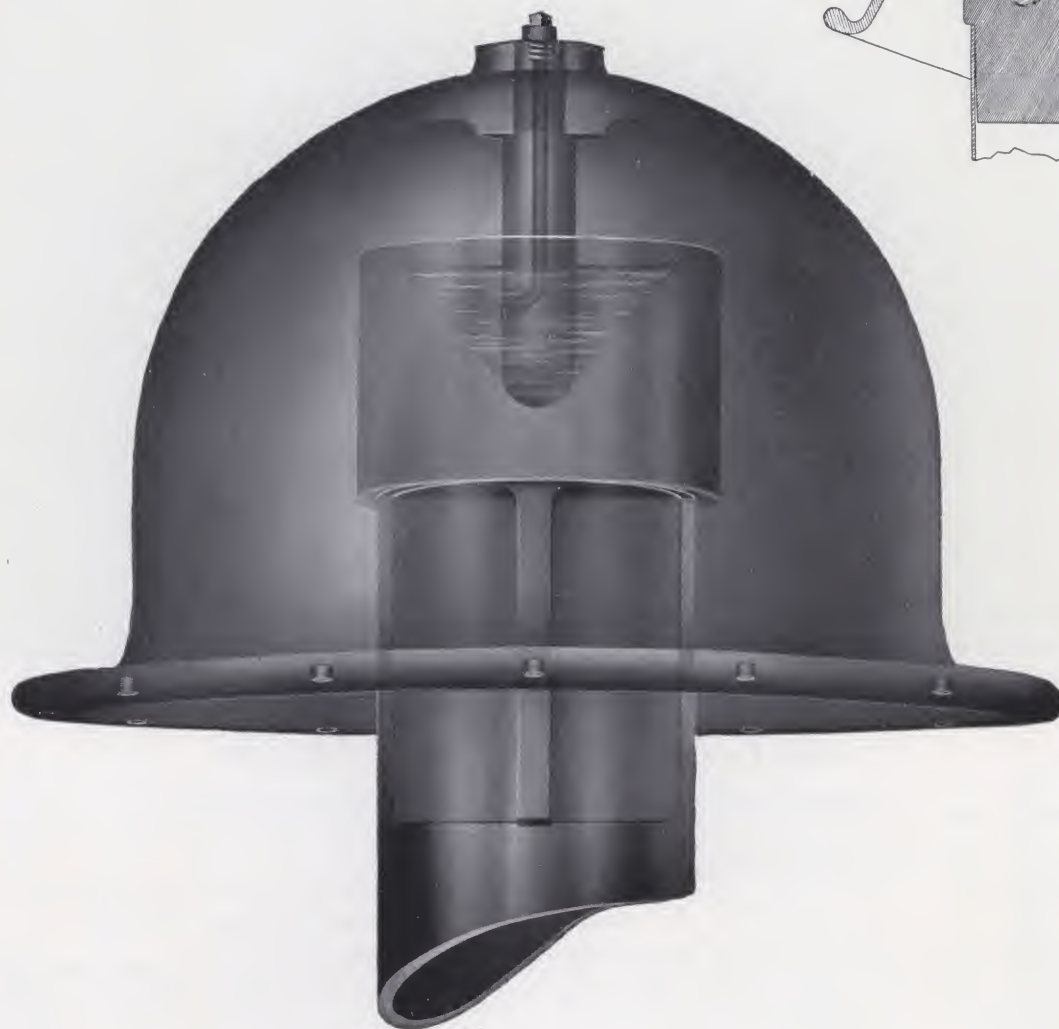
Pipe required—1 piece 4 inch (inside measure) 18 feet in length, standard.

No. 220—Code—LIYIZ —Head, base flange, top plug, and six ladders, either type (specify type), no pipe, weight about.....	125 lbs.
No. 221—Code—LIYJN —Head, base flange, top plug, and eight ladders, either type (specify type), no pipe, weight about.....	136 lbs.
No. 222—Code—LIYNS —Ladders, either type, each.....	16 lbs.
No. 223—Code—LIYOB —Head only, weight about.....	60 lbs.
No. 224—Code—LIYUC —Galvanized pipe, 18 feet, 4-inch, weight.....	180 lbs.

See Price List and Discount for Catalog No. 13

See page 36 for Home Yard Play Goods

"IT PAYS TO PLAY"



Ocean Wave Head

THIS is a development of our own. The entire moving load is carried on a hardened steel pin which is securely set in the hood.

This in turn finds a hemispherical bearing in the top pipe plug, which is made of chilled iron.

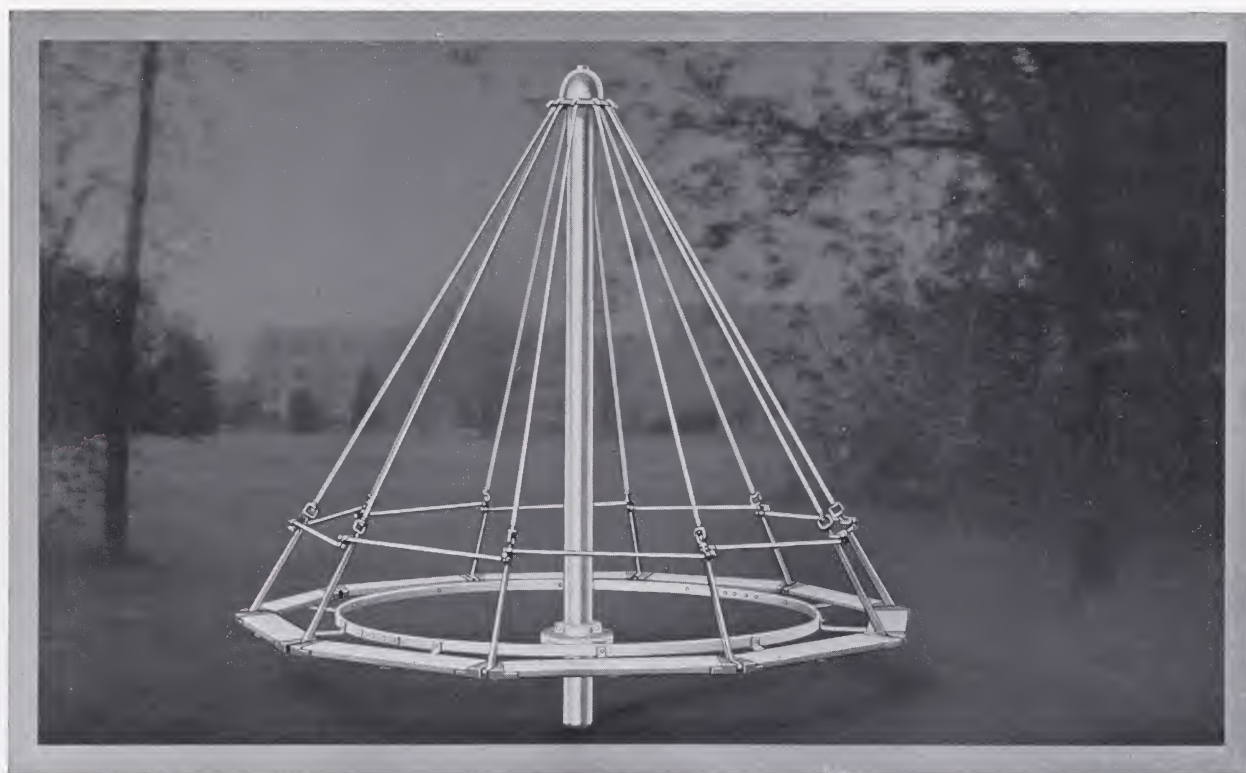
This plug is so shaped as to form an oil reservoir,

holding less than one pint. The oil completely covers the bearing.

To fill the oil reservoir remove the screw plug from the extreme top of head. One filling a season is all that is necessary.

This head will give the utmost service and satisfaction, because of its superior design.

See page 62 for recreation illumination



Improved Ocean Wave

MANY new and unique features are incorporated in the makeup of this apparatus, all having been adopted after careful study.

The safety guard rail is so designed and placed that it is of greatest strength, adds rigidity to the ten support rods, also creates utmost handhold capacity, permitting greatest number of children to ride at a time.

This rail consists of ten short rigid hot galvanized steel pipes of 1 inch outside diameter.

The heavy steel "bumper ring" prevents the seat circle from striking the "center bumper" eliminating possible chance for injury to feet and legs. This "bumper ring" also enables children to ride facing the center with their feet resting upon the ring. The "center bumper" is heavily clamped to the center support tube and prevents injury to both tube and "bumper ring" as well as keeping down the noise.

The seat circle, 2 feet above ground, is constructed of ten heavy wood segments, cut straight with grain. These are connected by heavy malleable iron fittings in a man-

ner that permits of slight flexing. The load is thereby equalized on all support rods, each of which is attached at these points. Owing to the design of the seat board connection, it is possible for one man to assemble the outfit.

These features, with our improved head (illustrated on opposite page) together with best material and workmanship, make this really a superior piece of apparatus and one which is very popular.

Capacity—forty children at a time.

Height over all, 12 feet; extreme diameter of seat circle, 12 feet, seat boards 2 inches thick, 8 inches wide; smoothly dressed and heavily painted.

Support tube, galvanized drawn steel, 5 inches inside measure, set 4 feet in concrete on base flange. Some noise can be eliminated by filling tube with sand.

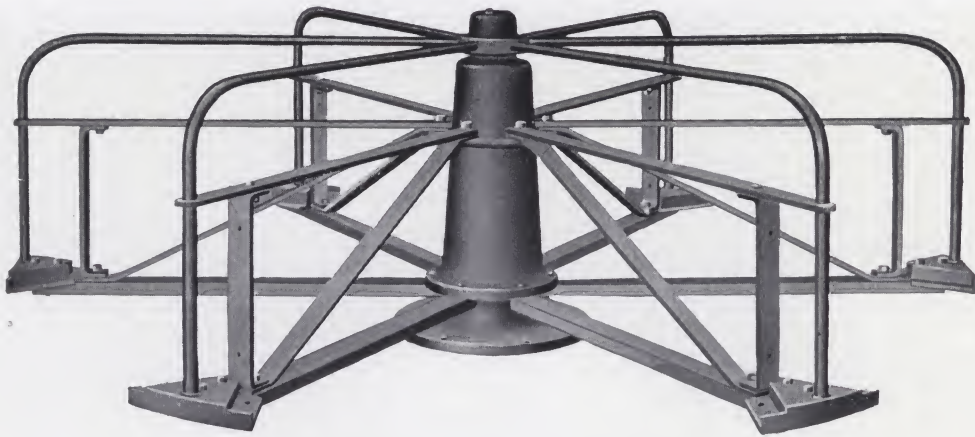
Ground space required for use—40 feet in diameter.

Two men should make installation in ten hours.

No. 201—Code—LIUPS—Complete, ready for shipment, weight about.....900 lbs.

See Price List and Discount for Catalog No. 13

See page 37 for Swimming Pool Equipment



Supporting Structure

STANDARDIZED construction is followed, in that all parts are made interchangeable. This is not only a manufacturing advantage but enables quick and easy assemblage on the playground, and insures perfect balance. Fewer parts are used than in any other make of merry-go-round. This structure is unusually heavy and well braced, being made of heavy steel bars, closely

resembling steel bridge construction. The ball bearing hub is shipped completely assembled; likewise are the arms. It is only necessary to bolt these to the hub flanges; these in turn are covered with the wood segments and panels. Not a nail or wood screw is used, all bolts and machine cap screws.

The Ball Bearing Hub

This is very simple in design, being constructed of few parts.

Bearings and lubrication have been given careful consideration.

The large machined steel shaft is securely shrunk into the revolving hub casing. This shaft, which acts as a pivot, is carried by two large, self-contained type, ball bearings. These in turn are supported within the oil case of the base casting. This is the best mechanical arrangement for this purpose known to the engineering world.

These bearings, operating under oil, will last indefinitely, and only require the oil level being maintained above the upper bearing.

Ordinarily, the case requires filling only once a season. Often these run two or three years without refilling.

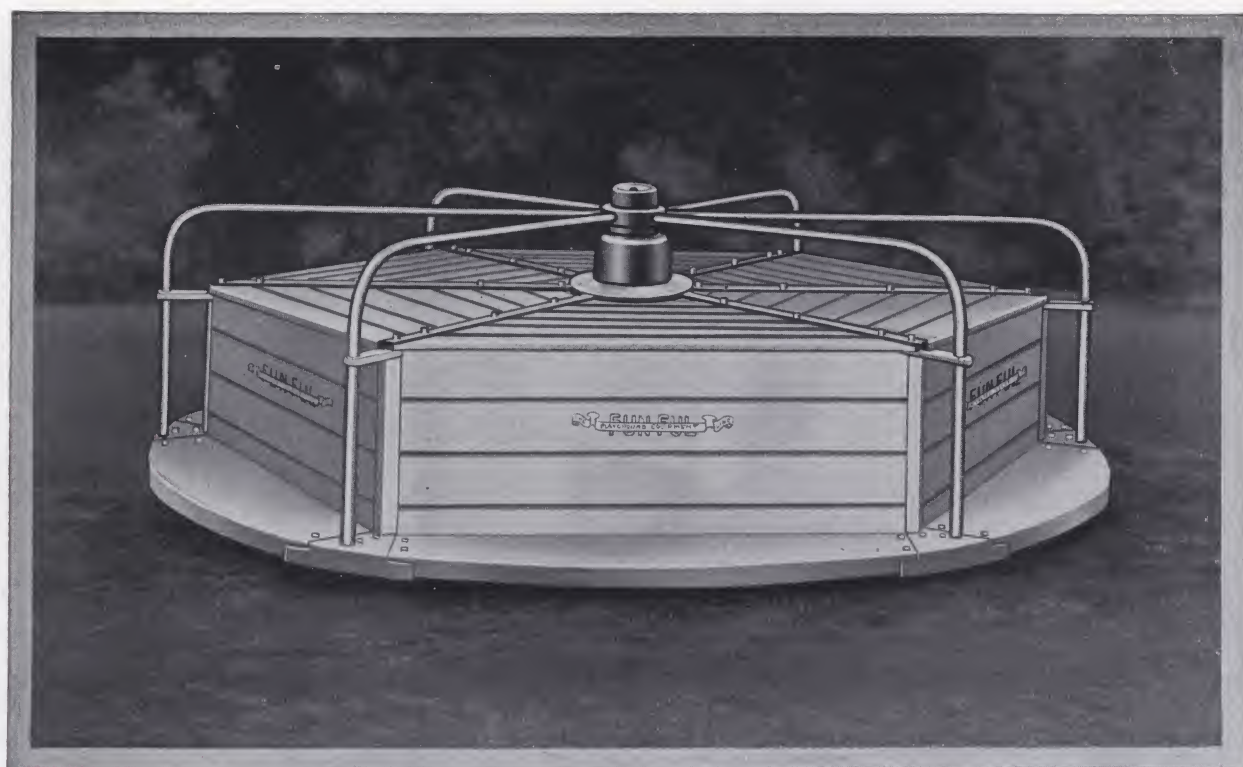
The larger size (No. 215) requires nine quarts of oil to fill the case; the small size (No. 216) requires one quart of oil. Any good brand of motor oil may be used.

The self-contained type ball bearings used here, as in all Fun-Ful Playground Equipment, eliminate all possible chance for lost balls or races, always maintain a certain amount of oil within themselves and always function properly. This type of bearing produces less friction and is ideal for the purpose; used exclusively by the Hill-Standard Co.



Phantom View of Hub
This hub alone weighs over 600 lbs.

See page 62 for recreation illumination



Ball Bearing Merry-Go-Round

(Two Sizes)

THESE attractive, easy running merry-go-rounds are a delight to the children, and add greatly to the popularity of a playground; beautifully painted and decorated in bright colors. They bespeak of happy children.

No. 215 has capacity for thirty-five children at a time.
No. 216 for eighteen small children.

Unusually well built; will stand the roughest treatment and continue to run true indefinitely with very little care and attention.

Supporting structure (see opposite page) made entirely of steel and iron, following best engineering practice;

this metal entirely covered with heavy wood panels and segments, nicely fitted and held in place with bolts and steel studs.

This Merry-Go-Round is set on concrete base, level with top of ground. Anchor bolts and templet are furnished.

You can buy nothing better of its kind.

Two men should make installation in ten hours.

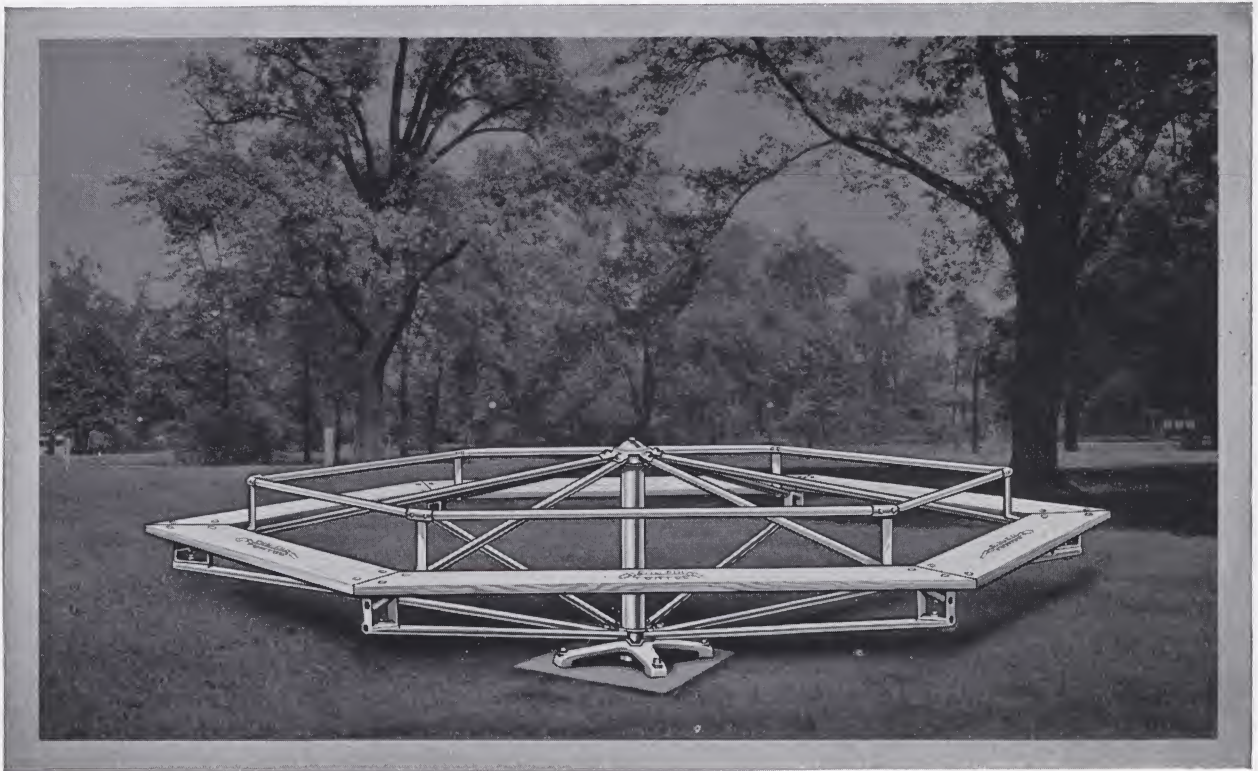
Both sizes are the same in design and construction.

Ground space required for safe use—No. 215, 20 feet in diameter. No. 216, 10 feet in diameter.

No. 215—Code-LIW0Z—Packed knocked down for shipment, weight about.....	1550 lbs.
Extreme outside diameter.....	10 ft.
Height over all.....	44 in.
Handrails, galvanized steel pipe, diameter.....	1 in.
No. 216—Code-LIWUB—Packed knocked down for shipment, weight about.....	350 lbs.
Extreme outside diameter.....	5 ft.
Height over all.....	22 in.
Handrails, galvanized steel pipe, diameter.....	1/2 in.

See Price List and Discount for Catalog No. 13

See page 36 for Home Yard Play Goods



Merry-Go-Round

TO meet a demand for a lower priced, light weight, easily operated merry-go-round, we have developed this model. Few types of play apparatus offer more attraction and pleasure with such capacity as this merry-go-round. It is offered in two sizes, i. e., 12 feet and 16 feet, outside diameters.

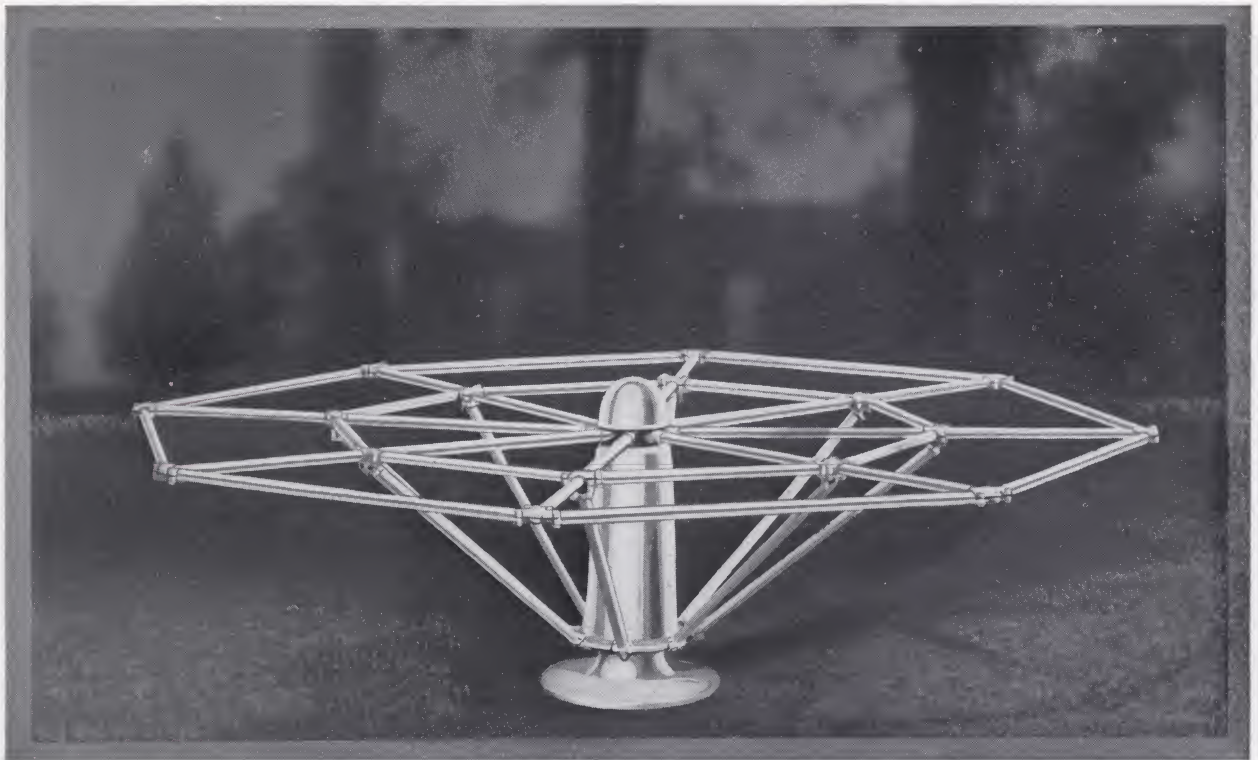
The rotating frame, or wheel, is of hot galvanized mal-

leable iron and steel. Seat boards are of selected clear stock, heavily painted bright orange. Hub fitted with two large self-contained ball-bearings, enclosed and protected against dust, dirt, or damage.

Set in concrete base flush with ground level and held in position by anchor bolts. Drawing furnished for installation; two men should make installation in five hours.

- | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| No. 212—Code—LIVYO —(small size) 12' extreme diameter, 26" height over all, 19" height of seat board above ground, 6 seat board sections 2" x 10" x 6', shipping weight about..... | 450 lbs. |
| No. 213—Code—LIWAV—(large size) 16' extreme diameter, 33" height over all, 22" height of seat board above ground, 6 seat board sections 2" x 12" x 8', shipping weight about..... | 550 lbs. |

See page 63 for installation information of all numbers



Revolving Parallel Bars



THIS is not a new and untried piece of apparatus as it has been approved by nationally known playground authorities. Its construction is suggestive of gymnastic stunts with an added revolving or merry-go-round feature. It is worthy of all well patronized playgrounds because of its great capacity, small ground space necessary and its FUN-FUL qualities. Substantially made of steel and iron throughout, all bars and fittings being heavily galvanized. Illustration at left shows ball bearing hub.

This apparatus revolves on large self-contained ball bearings, operating submerged in oil. The hub base is set flush with surface on concrete base with anchor bolts imbedded. One filling each season is sufficient for the oil cavity.

Extreme diameter from left to right, 12 feet; bars 42 inches above ground; bars 15/16 inches outside diameter. Space required for use, 16 feet in diameter.

Two men can make installation in five hours.

No. 262—Code—LODIK—Complete, packed for shipment, weight about.....1,025 lbs.

*See Price List and Discount for Catalog No. 13
See page 37 for Swimming Pool Equipment*



Calumet Coaster

THE coaster is the same as our No. 470 slide, (on opposite page), with the exception of the stairway and handrails. The stairway on this model is constructed of hardwood, well fitted and bolted. It is of generous width and proportion, with two handrails and will accommodate a large number of children.

The cost of building a wood stairway is considerably less than building a steel stairway. Therefore, we are able to offer this outfit at a lower figure than our No. 470.

This, however, must not be regarded as a compromise as it is a large first-class slide that will prove to be an attractive addition to any playground. We furnish either wave or straight chutes as indicated below. When ordering please state choice of chute bed way—hardwood or rust resisting metal; no difference in price. If no

choice is stated, we reserve the right to ship either type.

We use the safety guard-rail on this slide. It is not only a safety feature, but it adds very materially to the strength of the handrail. The slide is the most popular of all playground apparatus and is the best investment, because of its large capacity of 120 "slides" per minute.

Five men should make complete installation in ten hours.

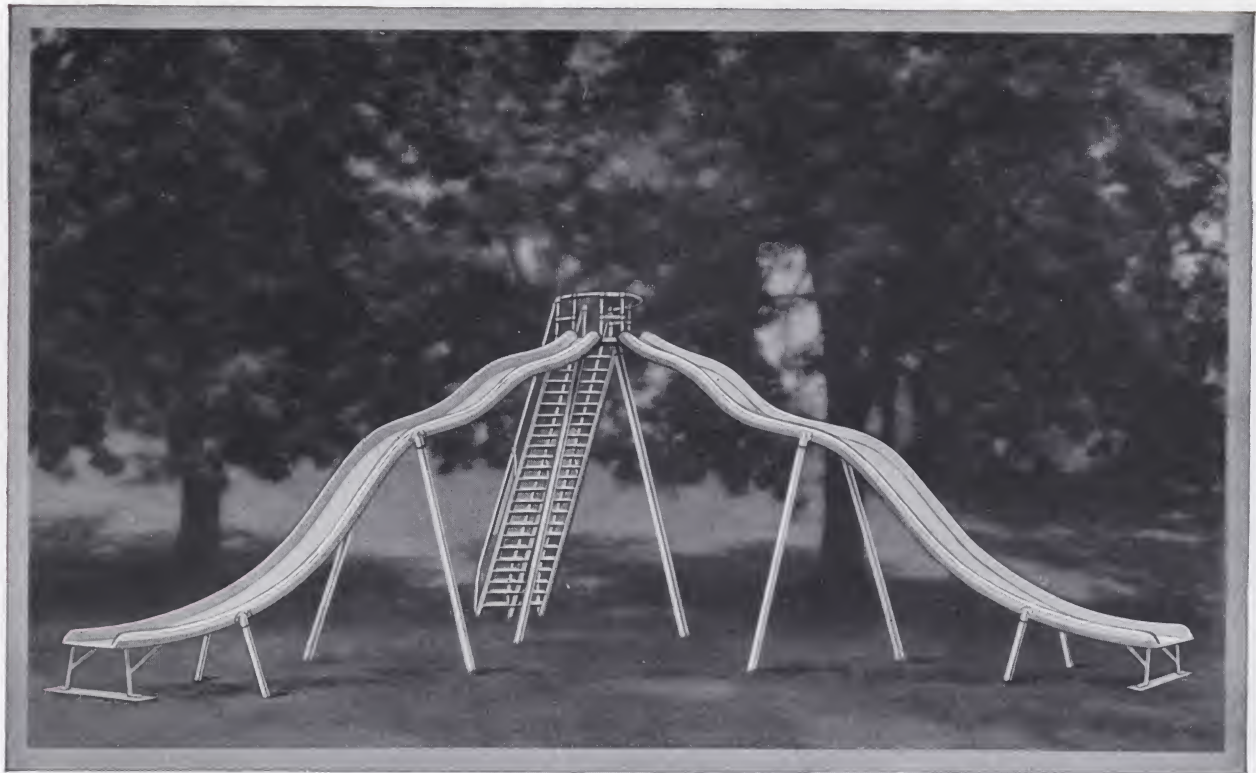
Ground space required for use, 30 feet by 50 feet.
Height over all 16 feet; height of top platform, 14 feet; length of chutes, 30 feet.



- No. 471—Code—LUGSO —Complete with two wave chutes as illustrated above, weight about.....1,445 lbs.
- No. 472—Code—LUGUT—Complete with two straight chutes, with retarding curve, weight about.....1,450 lbs.
- No. 473—Code—LUGVY—Complete with one straight and one wave chute, weight about.....1,440 lbs.
- No. 474—Code—LURYH—Complete with two straight All Metal chutes, weight about.....1,500 lbs.

See Price List and Discount for Catalog No. 13

See page 36 for Home Yard Play Goods



Fun-Ful Double Coaster

HERE we have illustrated one of our largest playground slides. It will accommodate one hundred children each with a "slide" per minute, without overcrowding; a real amusement device for the youngsters. Chutes are 30 feet in length (two sections each), 19 inches inside width, 6 inches deep. These slides can be furnished with two wave chutes as illustrated, or with two straight chutes (retarding curve at lower end) or with one each. See catalog numbers below.

Customers are given choice of either hardwood or rust resisting metal bed ways, at no difference in cost, but we must insist upon the customer stating his choice when ordering; otherwise, we reserve the right to ship either type. This slide is fitted with all steel and iron double stairway, with three galvanized iron handrails securely fastened. The lower ends of risers are fitted with heavy iron anchors for imbedding in concrete.

Safety guard rail across chute exits, prevents children

being pushed off the platform, and compels a sitting posture before going down the chutes; the feature developed by us, and heartily approved by park and recreation authorities. All braces are of steel with carefully designed fittings and anchors for imbedding in concrete. Slide is made of steel and iron except chute and floor of platform, these of hardwood. Outfit is heavily painted and varnished, except galvanized metal parts; inside and top of chute handrails and wood bed ways are finished in natural color, filled, hand rubbed and varnished; a big first-class slide of large capacity—leading attraction to the playground.



Height over all, 16 feet; height of top platform, 14 feet; length of chutes, 30 feet.

Ground space required for use, 30 feet by 50 feet.

No. 470—Code—LUGPA—Complete with two wave chutes as shown, weight about.....	2,060 lbs.
No. 475—Code—LUHER—Complete with one wave and one straight chute, weight about.....	2,050 lbs.
No. 480—Code—LUIJT —Complete with two straight chutes, weight about.....	2,065 lbs.
No. 482—Code—LUJAR —Complete with two straight ALL-METAL chutes, weight about.....	1,705 lbs.

See Price List and Discount for Catalog No. 13

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New "Chicago" Slide

WE build these for the Chicago South Park Commission and follow their specifications to the letter. They have proven to be satisfactory under the most severe conditions, and have withstood terrific abuse for many years. We have obtained permission to manufacture and sell them to the trade.

All things considered, better value in a park slide has not as yet appeared on the market.

It has large capacity—as many as one hundred and twenty "slides" per minute with safety and no overcrowding.

Extra heavy hardwood construction throughout, well fitted and ironed.

You will notice that we have included the strong, safety guard rail; chutes furnished with either hardwood or rust resisting metal bed way at no difference in cost.

Mention your choice when ordering; this is important.

These slides can be furnished with two straight chutes as illustrated, or if the customer prefers, one wave and one straight chute. See catalog numbers below.

Height over all, 10 feet, 4 inches; height of top platform, 8 feet.



Ground space required for use, 30 feet by 40 feet. Chute is 16 feet in length; in one section and is detachable; well painted with good weather-proof paint. This slide, like all Fun-Ful apparatus, is guaranteed to give the utmost service and satisfaction when properly installed.

Three men should make installation in eight hours.

No. 430—Code—LUBKA—With two straight chutes, as illustrated, weight.....	620 lbs.
No. 435—Code—LUCAL—With two wave chutes, weight.....	630 lbs.
No. 432—Code—LUBNO—With one straight and one wave chute, weight.....	625 lbs.

See Price List and Discount for Catalog No. 13

See page 36 for Home Yard Play Goods



Fun-Ful Special Slide

(Portable)

THIS is one of our most popular slides, particularly with schools. It is made mostly of hardwood.

This slide is furnished with safety guard rail and is recommended by playground authorities.

Chute furnished with hardwood or rust resisting metal bed way at no difference in price. Please state your choice.

Stairway is made of hardwood, well braced, fitted and bolted, insuring best construction and long life.



Stair treads—7½ inches by 19 inches, of one inch clear stock; risers, 1 inch by 8 inches.

The chute is demountable, a great convenience when moving.

This slide, like all Fun-Ful goods, is guaranteed to give the best service and satisfaction. It is the best value of which we have any knowledge.

Well painted and carefully finished; inside of chute in natural color, filled and varnished; handrails galvanized. It will add to the attractiveness of any playground. This represents unusual value. Height over all, 10 feet; height of platform, 8 feet; chute length (one section), 16 feet.

Ground space required for use, 15 feet by 25 feet.

Capacity, 60 "slides" per minute.

Two workmen should assemble either of these in one hour.

No. 410—Code—LOYZK—Complete, as shown, weight about.....	420 lbs.
No. 415—Code—LOZHO—Complete, with wave chute, weight about.....	425 lbs.

See Price List and Discount for Catalog No. 13

See page 62 for recreation illumination



Fun-Ful Coaster

WE boast of this as being the best medium sized slide on the market; adopted as standard slide equipment by a large majority of our greater cities for their playgrounds.

All steel and galvanized malleable iron, except the chute bed way of either hardwood or Armco galvanized iron; furnished at no difference in price. Please state choice when ordering, otherwise, we reserve the right to ship type which is convenient. The demountable chute makes the slide easily portable, a desirable feature when moving.

The overhanging safety guard rail prevents youngsters from being pushed off the platform and compels a sitting posture before going down the chute.

A first-class slide in every respect that will give many years of satisfactory service.

Numbers 440 and 445 are 10 feet in height over all; top platform 8 feet above the ground; chutes 16 feet in length. Ground space required for use, 15 feet by 25 feet.

Numbers 446 and 447 are 12 feet high over all; top platform 10 feet above ground; chutes 20 feet long, otherwise follow same construction. Ground space required for use, 15 feet by 30 feet. Both imbedded in concrete.

All numbers here mentioned have a capacity of 60 "slides" per minute.

Two workmen should assemble any one of these in two hours.

No. 445—Code—LUDMA—Complete, as shown, with straight chute, weight about.....	425 lbs.
No. 440—Code—LUCRY —Complete, with wave chute, weight about.....	430 lbs.
No. 446—Code—LUDNE —Complete, with 20 foot straight chute, weight about.....	550 lbs.
No. 447—Code—LUDSY —Complete, with 20 foot wave chute, weight about.....	555 lbs.
No. 448—Code—LUDUR —Complete, with 16 foot ALL-METAL straight chute, weight about.....	397 lbs.
No. 449—Code—LUDYS —Complete, with 20 foot ALL-METAL straight chute, weight about.....	430 lbs.

See Price List and Discount for Catalog No. 13

See page 36 for Home Yard Play Goods



Fun-Ful Large Single Coaster

NUMBERS 450 and 455 are single chute slides with chutes 30 feet in length; top platform 15 feet above the ground; a "thriller" and one of the leading sensations of the playground. Ground space required for safe use, 13 feet by 40 feet.

No. 460, same design and construction, with 24 foot straight chute only, height of top platform, 12 feet. Ground space required for use, 15 feet by 30 feet. Braces, handrails, top platform and stairs are of malleable iron and steel.

We call particular attention to the improved overhanging safety guard rail that compels a sitting position before going down the chute. This type has been approved by the leading park and recreation authorities. Stairways and main supports are imbedded in concrete.

The chute, either wave or straight type, is in two sections and demountable.

Chute sections are connected by an improved coupling and so designed that there are no side projections; no danger of injury to children's hands; far safer construction.

Choice of either hardwood or Armco galvanized iron chute bed way, at no difference in price. We must insist upon customer stating his choice when ordering; otherwise, we reserve the right to ship either type.

The chutes used on all Fun-Ful slides are hand finished with great care.

All numbers here mentioned have a capacity of 60 "slides" per minute.

Three workmen should assemble and install ready for use any one of these slides in four hours.

No. 450—Code—LUEJS —Complete, as shown, with wave chute, weight about.....	915 lbs.
No. 455—Code—LUERC —Complete, same as No. 450 except with straight chute, weight about.....	910 lbs.
No. 458—Code—LUFAN—Complete, with ALL-METAL 30 foot straight chute, weight about.....	1190 lbs.
No. 460—Code—LUFNA—Complete, with 24 foot straight chute, weight about.....	850 lbs.
No. 462—Code—LUFPE —Complete, with ALL-METAL 24 foot straight chute, weight about.....	800 lbs.

See Price List and Discount for Catalog No. 13

See page 63 for installation requirements



Tunnel Slide

THE Tunnel Slide is one of the latest numbers of the Fun-Ful line and has been enthusiastically received by the leading playground authorities wherever it has been shown.

It has been durably designed and constructed and requires practically no maintenance needs other than an occasional coat of paint.

Sliding through the tube, as going through a tunnel, is fascinating. This number is safe beyond question, thoroughly tested and has been found satisfactory in every respect. It is radically new and different and there is that certain something about it that appeals to children of all ages. Any Park Board can be proud of a number such as the Tunnel Slide on its playground.

The "tunnel" is of galvanized Armco rust resisting iron, all edges and joints made smooth and safe, heavily

ironed and braced. The stairway, handrails and supports are all steel and malleable iron, hot galvanized and anchored in concrete.

We recommend this as being among the most durable pieces of outdoor playground apparatus. It will provide innumerable hours of health building, muscle developing, Fun-Ful play.

In planning your new playground or making additions to those already in use, we suggest that you seriously consider the Tunnel Slide. Massive in appearance, it will add greatly to any recreation center. Its capacity for "slides per minute" cannot be bettered.

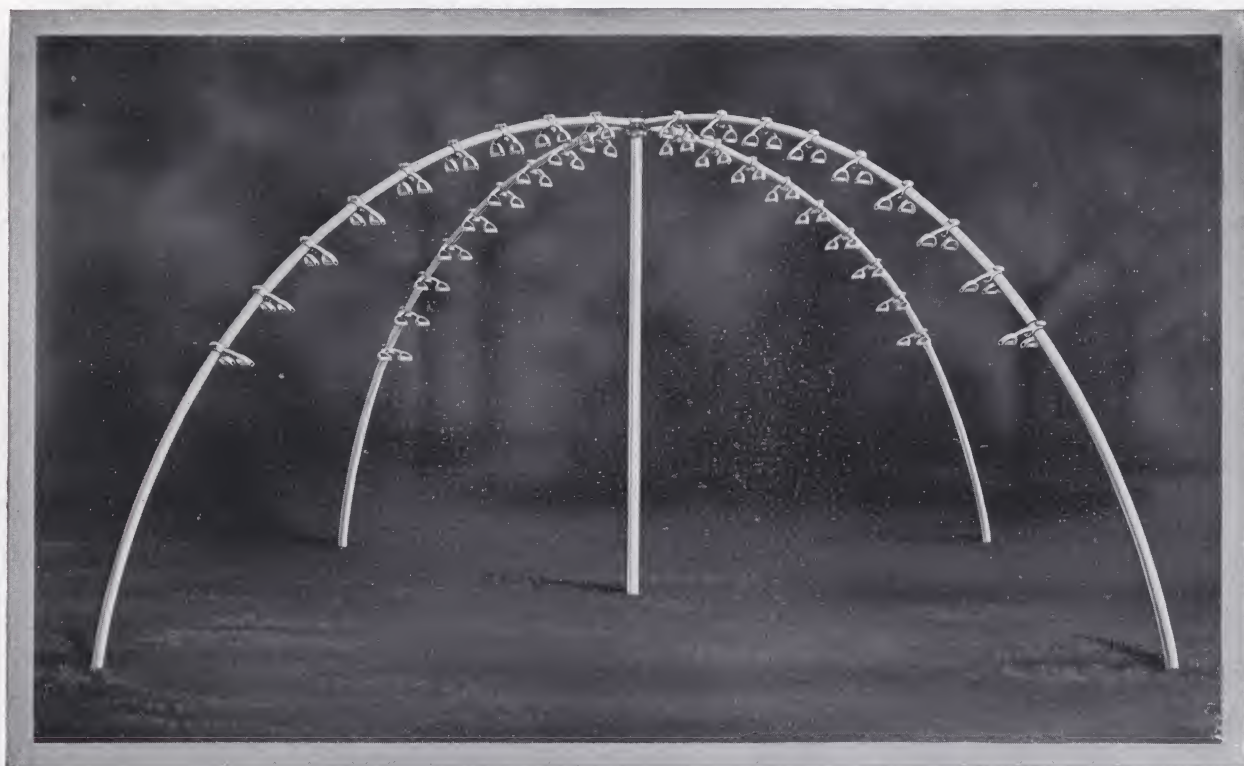
Width of chute at top, 29½ inches; height, 34 inches; inside diameter of chute center, 29½ inches; width of chute at bottom, 29½ inches; height, 34½ inches; length of chute 20 feet, 11 inches; height over all 13 feet.

No. 487—Code—LUJVO—Complete, weight about.....700 lbs.

"IT PAYS TO PLAY"

See Price List and Discount for Catalog No. 13

See page 36 for Home Yard Play Goods



Travelarc

THIS is an absolutely new number, which shows much promise of being adopted as standard playground equipment soon. It is scientifically designed and the basic principles are fundamentally correct.

The Travelarc is new and novel in the predominating idea of all FUN-FUL apparatus—to provide the maximum degree of health building happiness for the children at a minimum degree of cost.

It is an attraction to any playground and is in the shape of an igloo. This apparatus is safe and strong, the construction being such that even with the most vigorous use it will last indefinitely. There are no maintenance problems.

Children delight in cutting monkeyish capers. There is an unusual feeling of youthful physical accomplishment which accompanies the successful completion of the "hand over hand" exercise.

There is no piece of apparatus to compare with the Travelarc in aiding the children to execute this commendable form of exuberant exercise. Girls as well as boys experience much enjoyment on the Travelarc. In climbing the height is attained gradually up to the center sliding pole. The iron hand grips are pinned in the pipe in such a positive manner that they cannot be dislodged.

All five members are imbedded in concrete. The height from the ground is 10 feet and width 24 feet. All pipe is standard 2 inch. Sliding pole (2-inch), pipe and fittings all hot galvanized.

The Travelarc is so durably constructed that it will easily accommodate as many children as can find space on it. Its fascination has a magnetic power over them. Ground space required—24 feet in diameter.

Two men should make complete installation in four hours.

No. 247—Code-LOBGE—All apparatus, pipe and fittings, weight about.....525 lbs.

*See Price List and Discount for Catalog No. 13
See page 37 for Swimming Pool Equipment*

All-Steel Spiral Slide

SINCE its introduction a few years ago the All-Steel Spiral Slide has rapidly grown in popularity among playground, park and recreation people.

Before the introduction of this number there had been a universal demand for a spiral playground slide. Because of the very high cost of manufacture, few playgrounds could afford this novel number. It remained for this company to develop an All-Steel Spiral Slide that could be produced and sold at a reasonable price.

We are the only manufacturers of an All-Steel Spiral Slide. This number is unique in many ways and is very popular with the youngsters.

It may be installed in considerably less space than any other type of slide, with equal chute length and capacity. The ground space required is only 20 by 35 feet. May

be installed close to a wall or building, or in that corner of the playground that will not accommodate any other type of play apparatus.

This slide stands 18 feet above the ground. It is painted in bright colors, with decorations to match; with its bright galvanized bed way, it is a thing any playground committee is proud to behold.

The chute measures in its spiral descent, over 35 feet in length and of a pitch that prevents a dangerous speed.

The guard rim is unusually high, preventing possible chance for children to fall off the chute, regardless of the crowd; the safest slide on the market. There are no rivets, screws, or raw edged metal exposed to cause injury. Of the many spiral slides of our make now in use, not an injury of any kind has ever been reported.

The bed way is constructed of many Armco galvanized iron sheets, overlapping very much the same as shingles on a roof, or better still, like the scales of a fish.

These are shipped knocked down, i. e., spiral chute in two sections; stairway (one section) and braces.

The center column, stairway and braces are provided with anchors for imbedding in concrete; installation drawing furnished.

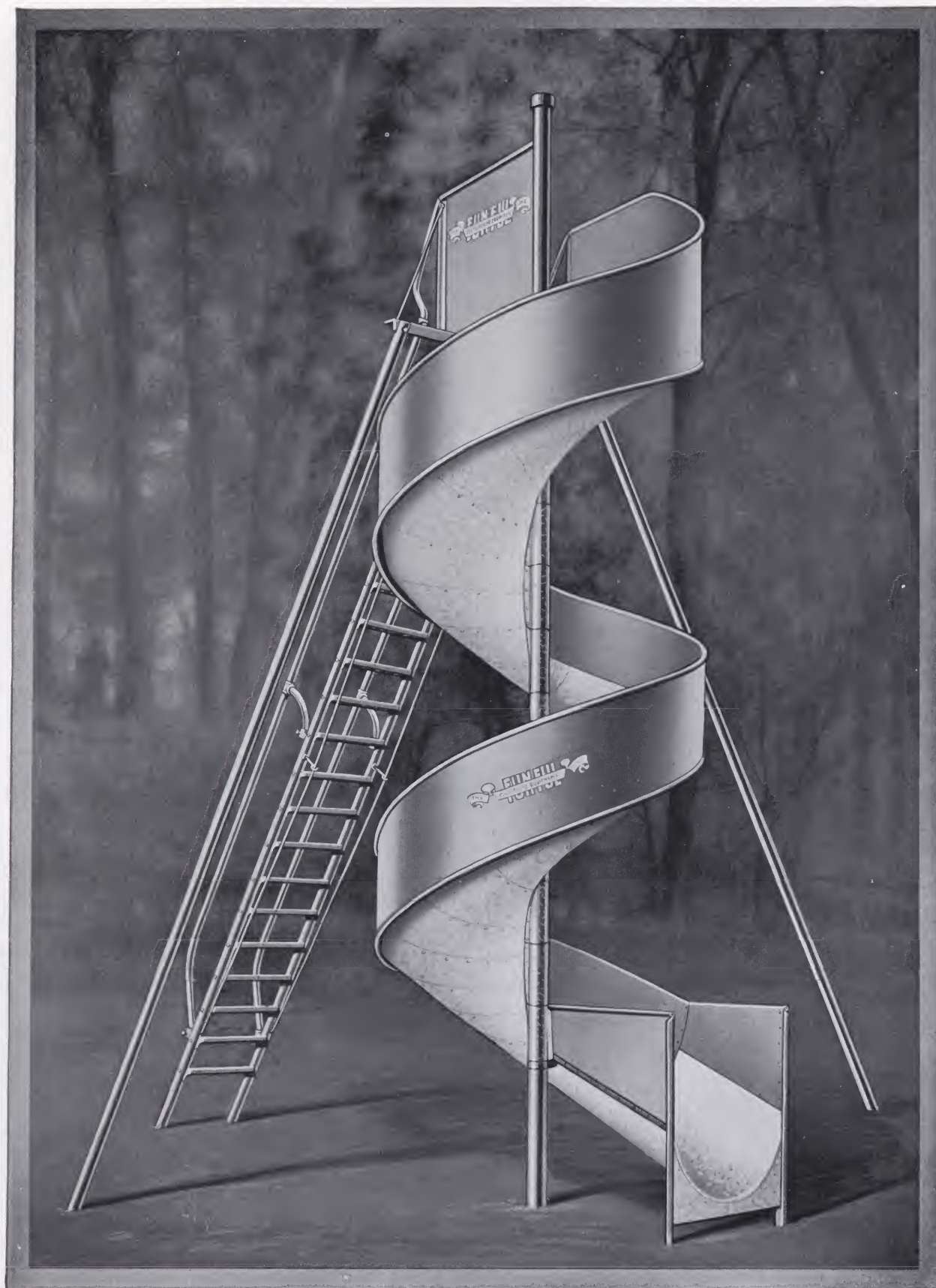
In view of its large capacity, attractive appearance and small space required the All-Steel Spiral Slide adds greatly to a recreation center and is enjoyed almost as much by the adults as by the children; capacity of sixty "slides" per minute.

Six men should be able to make installation in four hours, or less.



No. 484—Code—LUJOV—(One model and size only), complete ready for shipment, weight about..1200 lbs.

*See Price List and Discount for Catalog No. 13
See page 36 for Home Yard Play Goods*



Cellar Door Slide

Tested under the most exacting requirements known to playground authorities, the Cellar Door Slide has firmly intrenched itself in the front line of "best selling" playground apparatus.



As an example the Board of Education of the City of New York specifies this number as part of standard equipment for its city school playgrounds.

During a given period of time playground apparatus is subjected to more abuse, strain and "mass" use in New York City than any other place in the entire world. What better endorsement of play apparatus could be asked by any manufacturer or customer?

The outstanding feature of this number is its tremendous capacity. It has been placed at the disposal of 300 children, including those from the first to sixth grades—no other apparatus



on the ground, with instructions to use the slide as fast as possible. It was impossible to choke the chute or to cause interruption in the stream of little tots that poured over the platform and down the broad chute.

Considering capacity, cost and the amount of fun possible, as compared with other apparatus, it will be quickly noted that the cost per child is astonishingly low. The results obtained on many playgrounds throughout the country have been the most satisfactory in the history of the playground industry, according to those familiar with the requirements of playground equipment.



See page 62 for recreation illumination

"IT PAYS TO PLAY"



Cellar Door Slide

THE Cellar Door Slide is very sturdy in construction. It is not a toy, being made of heavy angle iron and hardwood timbers, weighing in all about 3,360 pounds.

The factor of safety is beyond question.

We regard this as the best investment that can be made in the nature of play apparatus, where a great number of children are to be provided for.

This slide will last indefinitely if given ordinary care. It may be left on the playground throughout the year.

The platform is mounted by means of a ramp instead of stairs. The ramp, with heavy crosswise cleats, measures 10 feet in width by 14 feet in length, rising 6 feet to the top platform.

The top platform measures 3 feet by 6 feet.

Chute is 12 feet in length, 10 feet in width. It is covered with rust resisting metal, and made in sections for convenience in shipping and assemblage.

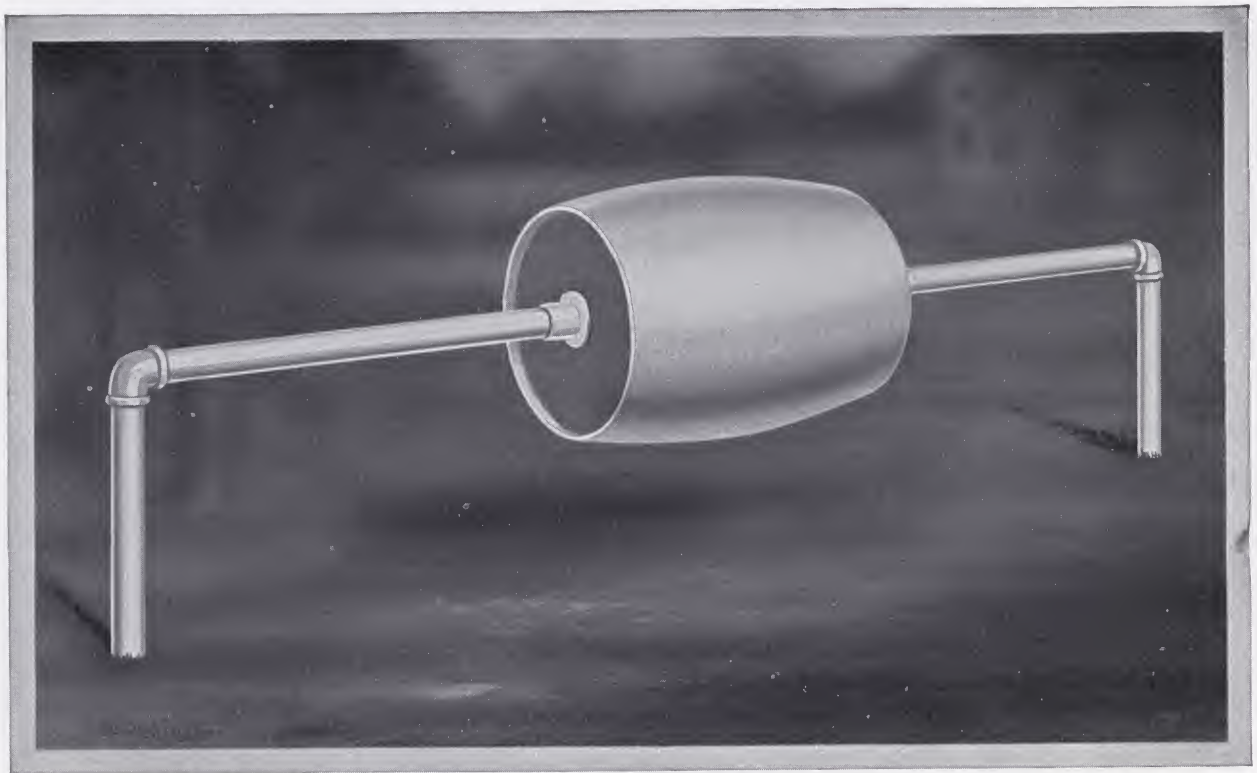
Level ground space required, 20 feet by 40 feet. This outfit is well painted for weather protection, and should be painted not less than every two years. Truly, this is an unique piece of playground apparatus of simple design, and should be on every playground.

Capacity of 150 "slides" and more per minute. Four men should make installation in six hours. It is anchored in concrete.

No. 490—Code—LUKIV—Packed complete for shipment, weight about.....3,360 lbs.

See Price List and Discount for Catalog No. 13

See page 37 for Swimming Pool Equipment



Barrel-of-Fun

THIS is an unique affair, but since its introduction a few seasons ago it has become quite popular and no playground is complete without it. This originated in the southern states with an enterprising park man. We have made a few changes in the construction to suit conditions on the average playground and it is so made that, after once installed, it requires no further attention. The barrel turns freely on the horizontal pipe axis, 2 feet above the ground. This axis, 10 feet in length, extends through the center of the barrel heads, and is supported at the extreme ends by uprights which are imbedded in concrete. The barrel is made especially for the purpose; constructed of steel; not a bolt, screw or rivet protrude to cause injury or to tear the clothes. All parts are made as smoothly as possible.

Many feats of skill may be performed upon this barrel, such as balancing with the body in all conceivable positions, diving over, somersault, treadmill and a number of other stunts.

"Barrel-of-Fun" is a safe, durable, low-priced piece of equipment and it will afford an unlimited amount of amusement and healthful exercise for the children; always in order and ready to use.

Ground space required for use, 10 by 10 feet; height over all, 3 feet.

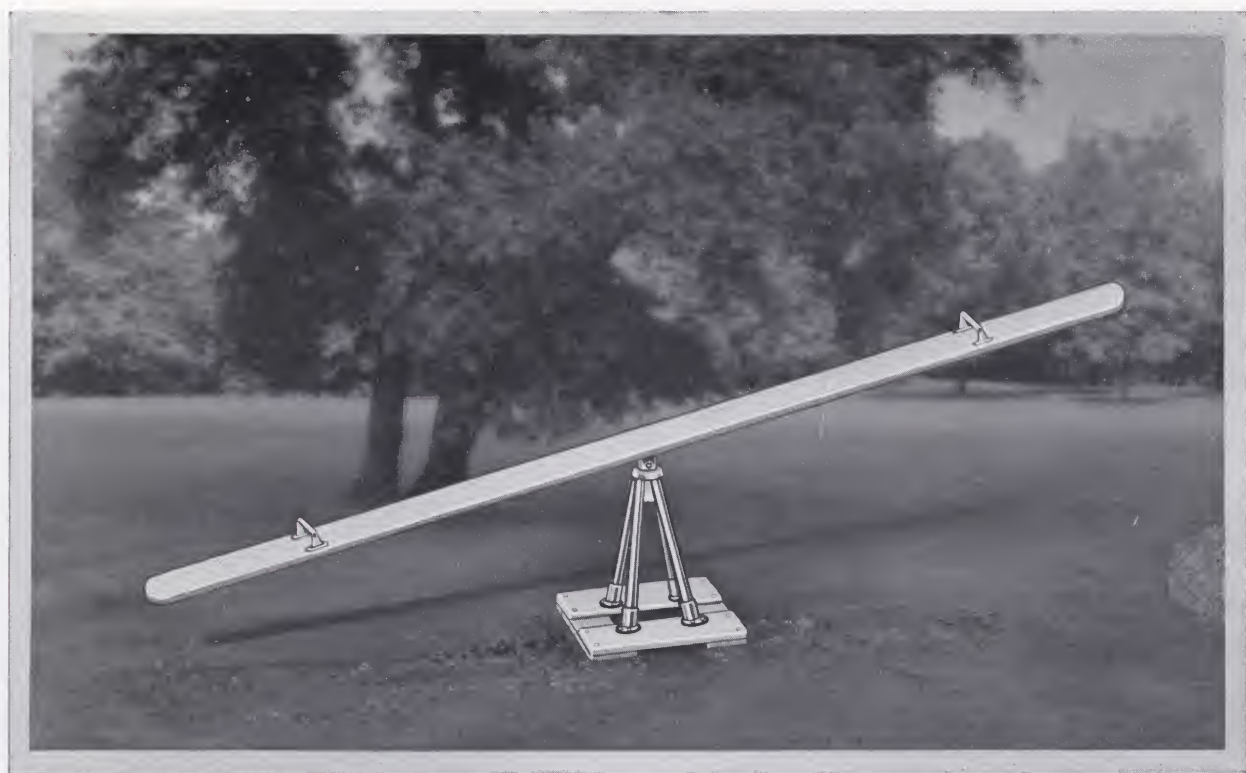
One workman should make complete installation in four hours.



No. 290—Code—LOGUP—Complete, except pipe, weight about.....	140 lbs.
No. 291—Code—LOHAL—Galvanized pipe, cut to lengths, weight about.....	80 lbs.

See Price List and Discount for Catalog No. 13

See page 36 for Home Yard Play Goods



Single Seesaw

(Portable)

THIS is a full size Seesaw Board, the same dimensions as the large sets our Nos. 230, 233 and 235 shown on page 29.

We have mounted this on a very substantial portable base. This type is very popular with park men, because they can be readily moved and taken in for the winter. They are self-contained, therefore, there is no likelihood of lost parts.

Because of their being self-contained and portable, they

are conveniently moved from place to place as the sod begins to show wear.

Ideal for home use, indoors or out. Some park authorities prefer a number of these in preference to the larger multiple sets. These are good value, strong and durable.

You will make no mistake in buying them.

Can be assembled by one man in 30 minutes.

Ground space required for use—6 feet by 20 feet.

No. 238—Code—LOAPS—Complete, as shown, weight about.....150 lbs.

Single Seesaw

(Stationary)

OCCASION demands, at times, the use of Single Seesaw Boards and for such we recommend our No. 237.

For this, we furnish a single board of the same dimensions, grips and finish as the No. 238, as illustrated above. This single board is supported by one vertical tube $4\frac{1}{2}$ inches in diameter, 4 feet in length, imbedded

2 feet in concrete with base flange anchor, heavy fulcrum irons under and connecting with upper end of tube.

This board is not adjustable or demountable.

Ground space required, 6 feet by 20 feet.

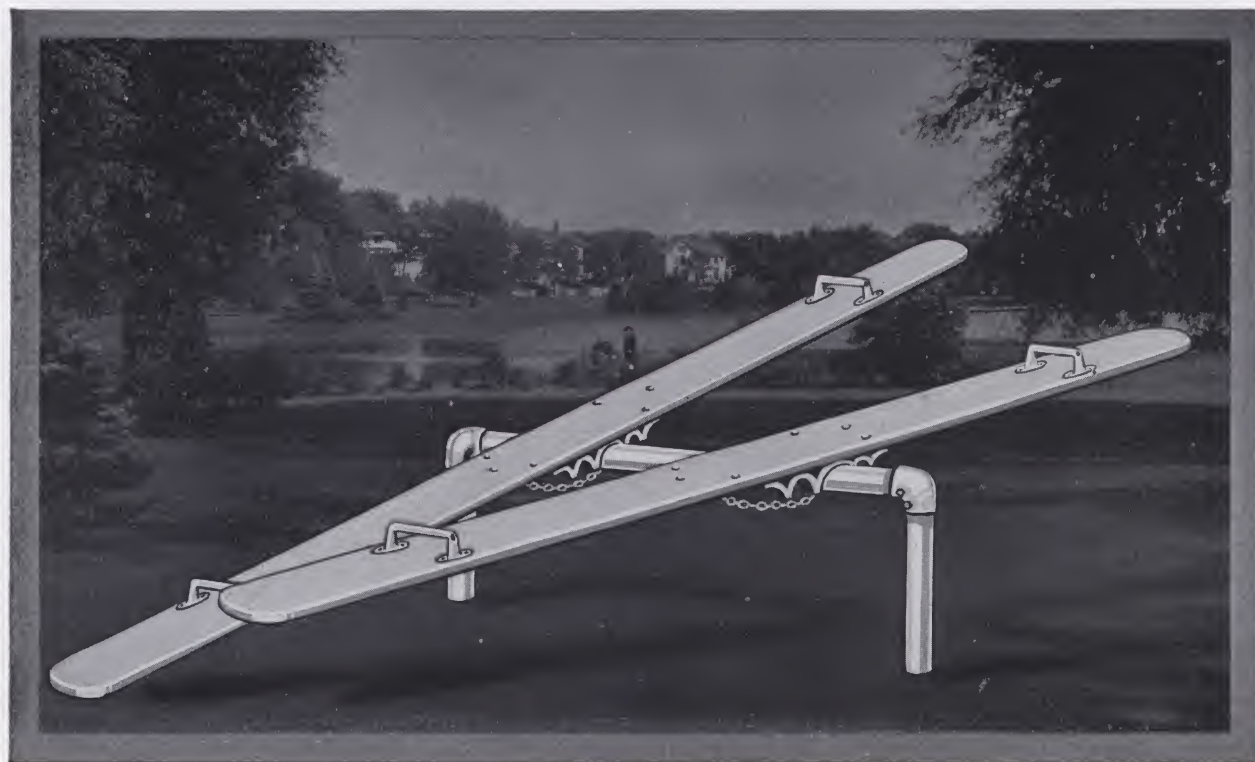
This is a very substantial arrangement and will give the utmost service; furnished in one size and style only.

One man should make installation in two hours.

No. 237—Code—LOLAP—Complete with tube, everything ready to install, weight about.....125 lbs.

See Price List and Discount for Catalog No. 13

See page 36 for Home Yard Play Goods



Two-Board Seesaw Outfit

A VERY simple piece of play apparatus and made of best materials and well designed. This is of the same general design and construction as our No. 230 except that two boards are used instead of four.

The boards are especially selected for this purpose, being long, flexible, clear of knots, sap vein or blemish of any kind.

Boards 2 inches thick, 12 feet long, 12 inches wide, planed smooth and with rounded edges and well painted to prevent weather action.

Grips are of one piece heavy malleable iron, well galvanized, and held in position on the boards by four bolts each.

Malleable notched fulcrum irons, two each, bolted underneath at the center of each board, makes possible

quick and satisfactory adjustment. One iron collar on cross frame between each fulcrum iron prevents boards from losing their position on frame.

A chain is provided and draped under each board and through frame, preventing removal of board. The vertical supports and cross member are of standard 3 inch steel pipe and has proven to be of ample strength to support with a large factor of safety as many children or adults that can find room on the boards.

Ground space required for use, 13 feet by 20 feet.

One man should make complete installation in four hours' time, or less.

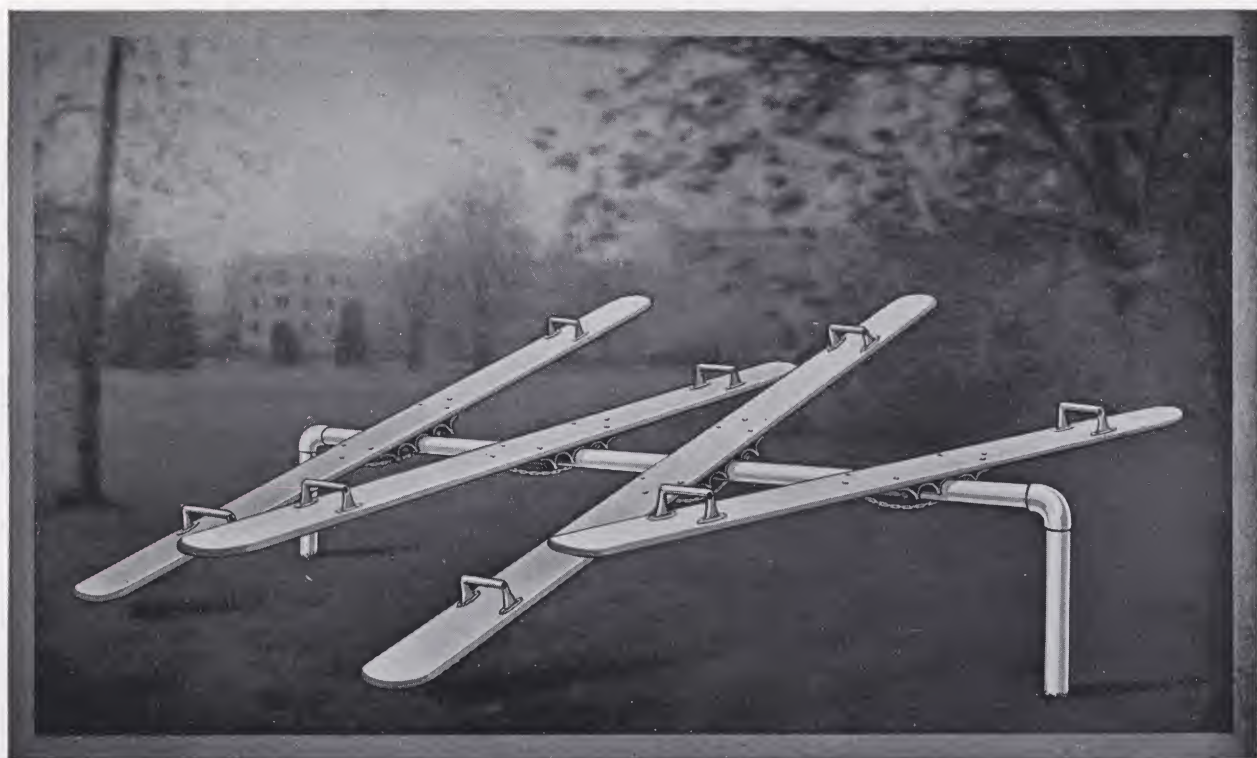
Frame uprights imbedded 2 feet 6 inches in concrete with base flanges. Pipe required—2 pieces 3 inch pipe 5 feet long; 1 piece 3 inch pipe 8 feet long.

No. 233—Code—LIZYA—Boards and all fittings, complete except frame pipe, weight about.....200 lbs.

No. 234—Code—LIZZE—Galvanized frame pipe cut to lengths for above, weight about.....100 lbs.

See Price List and Discount for Catalog No. 13

See page 62 for recreation illumination



Three and Four Board Seesaw Outfits

THERE is no playground complete without a Seesaw Outfit and there is no seesaw outfit superior to that illustrated above.

Nationally popular this set is one of the most rugged, most lasting and most exhilarating numbers known to the trade.

The boards are long and flexible, made of selected clear lumber, planed smoothly and edges rounded. They are brightly painted and add color to any playground. Boards are 12 feet long, 12 inches wide and 2 inches thick.

Grips of one piece heavy galvanized iron, bolted through boards, with nuts underneath.

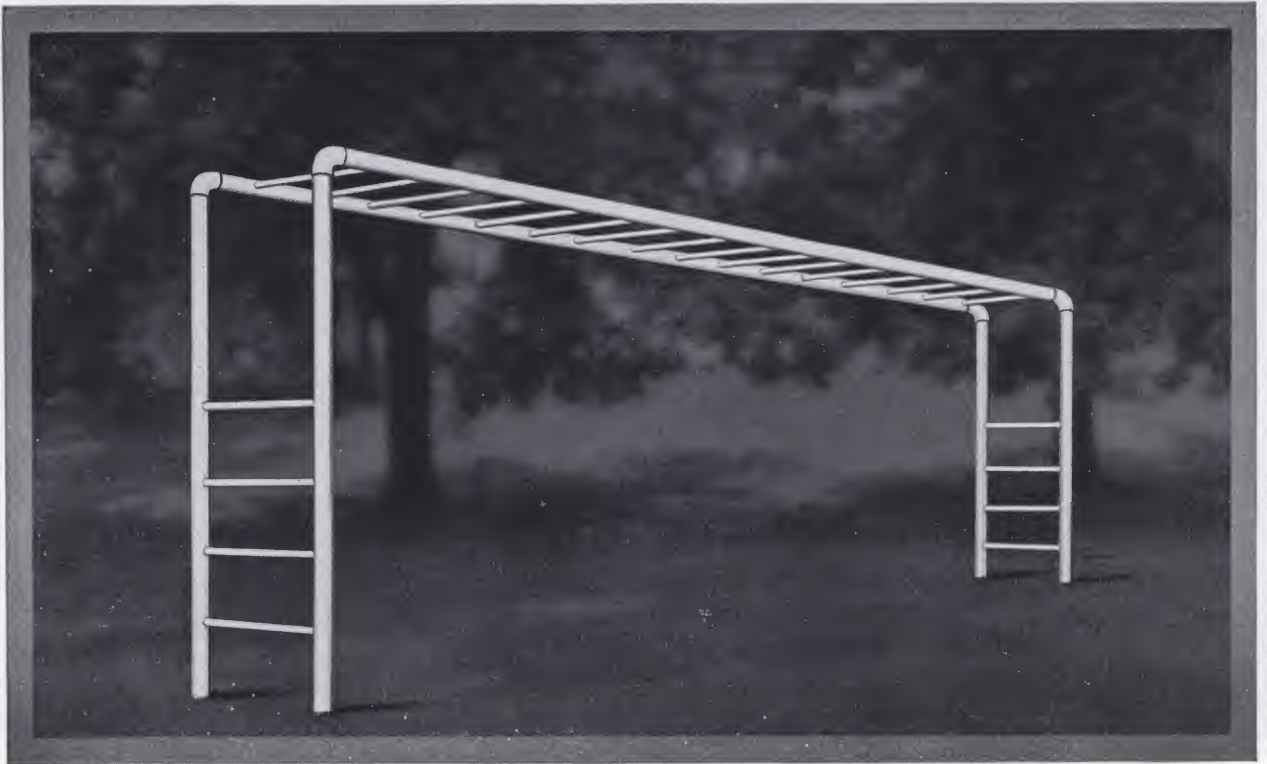
Malleable notched fulcrum irons are bolted to under sides of boards for adjustment. Iron collars are attached to frame to keep boards in a relative position. Chains through frame prevents removal of boards.

Ground space required per board, 4 feet by 16 feet. Frame uprights imbedded $2\frac{1}{2}$ feet in concrete. Base flange anchors are furnished. One man should make complete installation at the rate of one board and supports in three hours.

Pipe required for four-board outfit—one piece 3 inch pipe, 15 feet long; two pieces 3 inch pipe, 5 feet long. Three-board outfit—two pieces 3 inch pipe, 5 feet long; one piece 3 inch pipe, 12 feet long.

No. 230—Code—LIZIB —Boards (four) and all fittings complete, except pipe, weight about.....	400 lbs.
No. 231—Code—LIZOC —Galvanized frame pipe, cut to lengths, weight about.....	190 lbs.
No. 235—Code—LOAHL—Boards (three) and all fittings complete, except pipe, weight about.....	275 lbs.
No. 236—Code—LOAJM—Galvanized frame pipe, cut to lengths, weight about.....	165 lbs.

See Price List and Discount for Catalog No. 13
See page 37 for Swimming Pool Equipment



Horizontal Ladder

A PLAYGROUND or outdoor gymnasium is not complete without one or more horizontal ladders.

The monkey instinct, or wild desire on the part of children to climb, is gratified by the installation of this apparatus.

A few minutes' exercise each day on this equipment would be beneficial to anyone.

The horizontal ladder is particularly adapted for the purpose of developing chest, back and abdominal muscles. The children, of course, resort to all sorts of stunts, and we find this to be one of the most popular pieces.

It is simple in design and construction, and requires

little space with no upkeep; made entirely of galvanized steel, no bolts or screw heads to cause injury.

This outfit is of ample strength to support safely all the children who can possibly find room on the apparatus.

The upright supports and span members are $2\frac{1}{2}$ inches in diameter, the rungs slightly over 1 inch. Lower support ends are imbedded in $2\frac{1}{2}$ feet of concrete. Base flange anchors are furnished.

Height over all, 6 and $7\frac{1}{2}$ feet; length over all, 16 feet; width, 18 inches.

Ground space required for use—6 feet by 20 feet. Shipped in three sections.

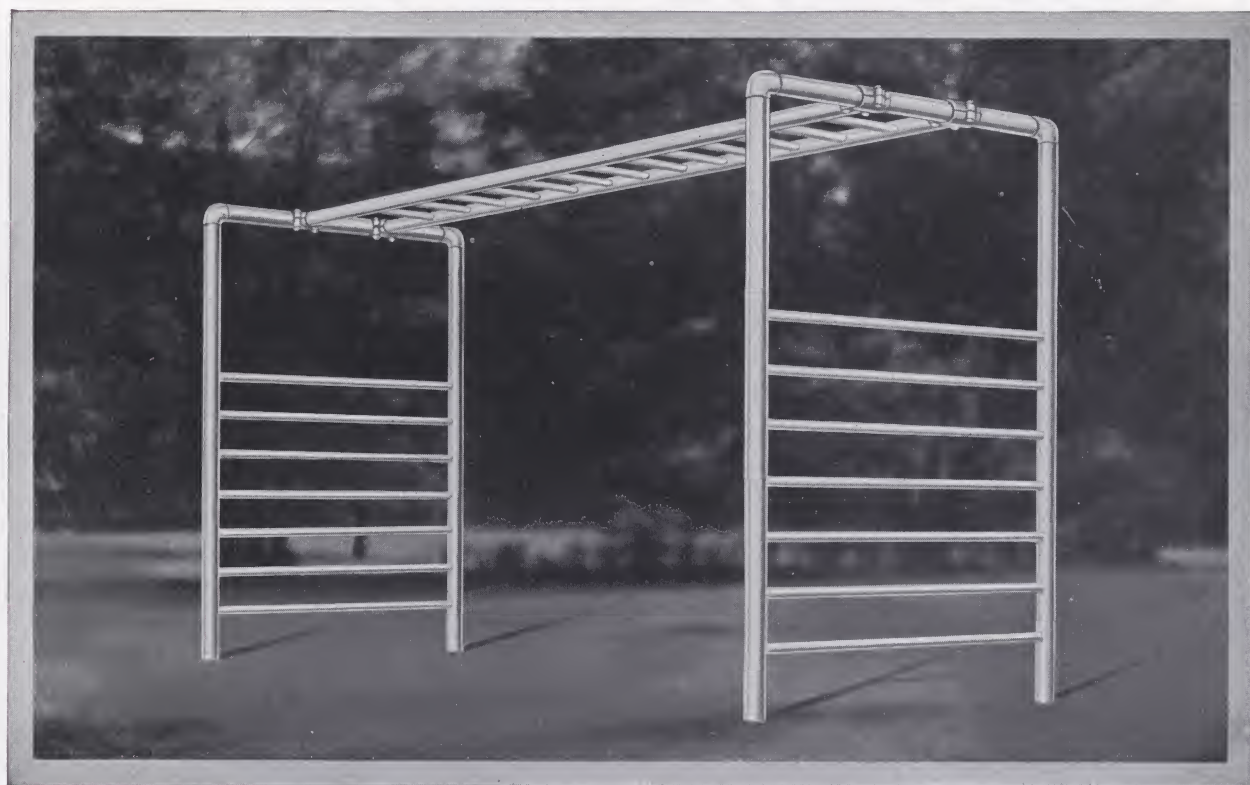
Two men should make installation in five hours.

No. 250—Code—LOBOJ—Complete with base flange anchors, height over all, $7\frac{1}{2}$ feet, weight about..320 lbs.

No. 249—Code—LOBLY—Complete, same construction, height over all, 6 feet, weight about.....300 lbs.

See Price List and Discount for Catalog No. 13

See page 63 for installation requirements



Horizontal Ladder—Stall Bars

THIS is the answer to a need long felt among athletic directors especially and school and recreation officials as a whole. It is new to the industry and is to the outdoor playground what similar apparatus is to all standard equipped gymnasiums.

There is no maintenance cost and only a minimum of ground space required. Here combined are two rudimentary pieces of gymnastic equipment, which for the first time are available to the trade as standard playground apparatus.

Because there are stall bars at each end of the horizontal ladder the capacity therefore is doubled.

Innumerable forms of exercises are possible on this apparatus. There is nothing which excels this number in the enjoyable, health building, muscle developing

exercises paramount in the ultimate solution of the modern playground problem. The horizontal ladder is 16 feet long, 18 inches wide; stall bars 5 feet wide; height over all, 7 feet. Main supports of standard 2-inch pipe. Stall bar rungs, regulation spaced, $\frac{3}{4}$ -inch pipe, round and smooth. Pipe and fittings hot galvanized. Apparatus is imbedded in concrete.

Playgrounds may now offer this outfit as an added argument for outdoor recreation. Experienced gymnasts readily appreciate the fine points of this apparatus and recommend its adoption universally.

Ground space required for use—5 feet by 25 feet.

Installation time—5 hours, two men.

We present this newest of new numbers with the same broad guarantee associated nationally with the FUN-FUL line.

No. 253—Code—LOCAG—Complete, apparatus and fittings, weight about.....430 lbs.

See Price List and Discount for Catalog No. 13

See page 37 for Swimming Pool Equipment



Circular Traveling Ring Outfit

"Revolving Wheel"

THE Circular Traveling Ring Outfit is now regarded as standard playground equipment of the leading recreation centers. Owing to its design and construction it permits a full quota of traveling rings to be adequately supported by only one vertical support pipe. Not only does this make for economy in construction cost, but it proves quite a saving of installation expense and considerably less ground space is required for its use.

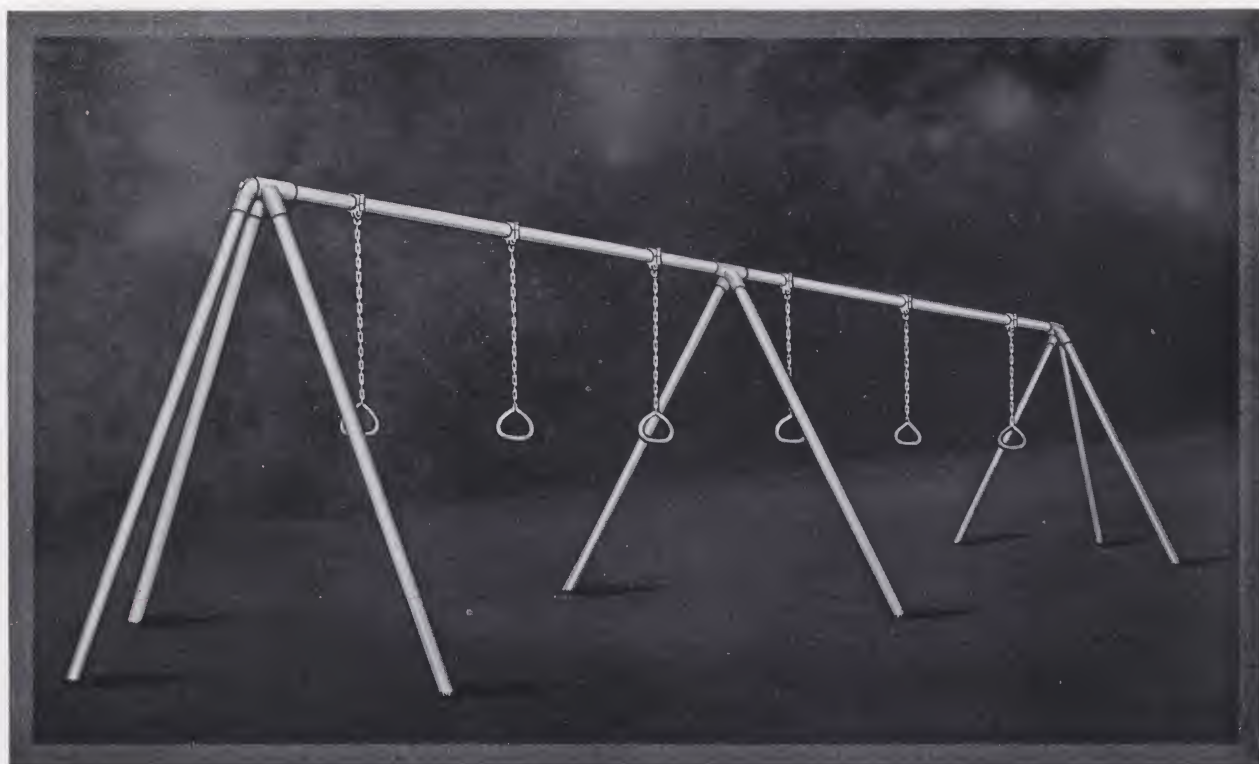
The results obtained are exactly the same as when using the conventional type of traveling rings, supported in one straight line, such as our No. 301, Traveling Ring Outfit, as shown on the opposite page. But this may also be used as a flying ring outfit, accommodating four youngsters at a time, with ample room and utmost safety. Please bear in mind that the overhead "wheel" revolves.

This outfit is very simple in design and construction but is made of the best material, entirely of steel and malleable iron. The overhead "wheel" spindle is securely clamped to the vertical support pipe and by this method a strong support for the rings is formed. The rings are of steel tubing, galvanized, and are swung four feet apart by extra heavy machine-made chains, which also are galvanized and provided with swivels.

Height above ground 14 feet, diameter of the "wheel" 10 feet, rings supported 6 feet above ground. Should not be operated on circular ground space less than 30 feet in diameter. Two workmen should make installation in ten hours. Pipe required—one piece 4-inch standard, 16 feet long.

No. 295—Code-LOHOP—All apparatus and fittings, no pipe, weight about.....380 lbs.
No. 296—Code-LOHPO—Galvanized support pipe, cut to lengths, weight about.....160 lbs.

*See Price List and Discount for Catalog No. 13
See page 36 for Home Yard Play Goods*



Line Traveling Ring Outfit

THERE is "oodles" of fun and healthful exercise to be derived from the use of this traveling ring outfit. It is almost as popular with the grown-ups as the children.

The rings, regularly, are of steel tubing, but if desired, cast aluminum rings will be furnished at slight additional cost. The rings are supported by heavy steel chains with swivels, which, in turn, are hung to ball bearing hangers, clamped to overhead frame member. These parts are galvanized. All overhead fittings are made of the best quality malleable iron, and of generous proportions in order that there may be no possible chance for breakage.

The frame pipe used is considerably heavier than need be for the actual load and service expected, but its safety is beyond question. In many cases, because of expense, there has been a tendency to construct these

frames with only six slanting supports. We have found these to be not only a vibrating, unsatisfactory affair, but unsafe, and we do not recommend a construction using fewer than eight 2-inch standard pipe supports in connection with 3-inch over-head pipe member, as shown.

This outfit is first-class and of best quality. You can buy no better.

Ground space required for use—20 feet by 60 feet.

Height over all, 14 feet; length over all, 44 feet; ground space required, 14 feet by 44 feet; frame set in concrete; base flange anchors furnished.

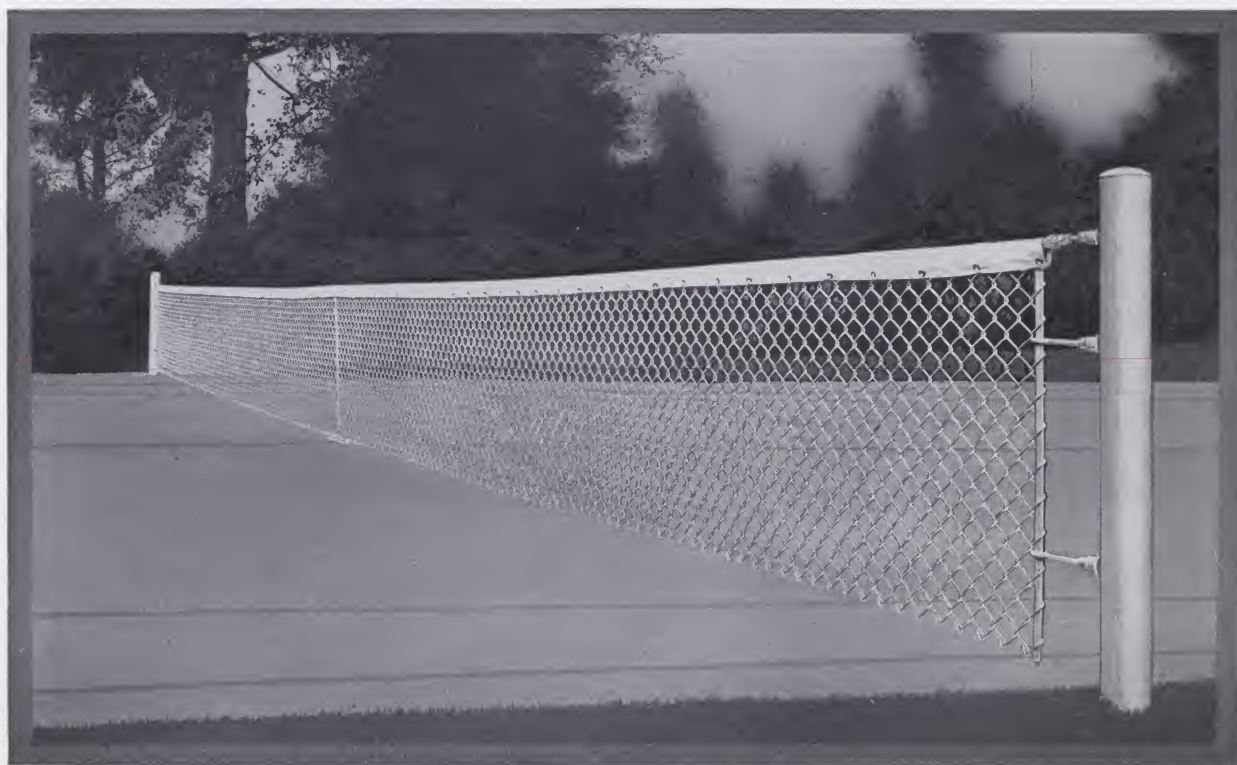
Four workmen should make installation in sixteen hours or less.

Pipe required—2 pieces, 3-inch, each 20 feet long; 8 pieces, 2-inch, each 17 feet long.

No. 301—Code—LOJAM—All apparatus and fittings, steel tube rings, no pipe, weight about.....	165 lbs.
No. 302—Code—LOJEN—All apparatus and fittings, aluminum rings, no pipe, weight about.....	165 lbs.
No. 303—Code—LOJIP—Galvanized pipe, cut to lengths, weight about.....	710 lbs.

See Price List and Discount for Catalog No. 13

See page 37 for Swimming Pool Equipment



All Metal Tennis Outfit

FOR playgrounds, parks, clubs, schools, colleges, universities and other recreation places; complies with United States Lawn Tennis Association specifications for championship cord nets; posts 42 feet apart, measuring from center to center; top of net to court 39 inches; length of net 40 feet, 6 inches. Net is made of copper bearing chain link woven steel wire, hot galvanized after weaving, tighteners of brass, upper edge of net supported by $\frac{3}{8}$ inch galvanized steel cable over which is laced a heavy canvas binding; posts of $3\frac{1}{2}$ inch I.D. 4 inch O.D. galvanized steel pipe set 4 feet in concrete. Entire outfit is rust proof.

Center of net marked by our exclusive combination marker and center support. This hinged support maintains permanent regulation height with proper flexibility and resiliency of net.

The heavy construction and permanence of materials

used in this outfit should serve a lifetime with no maintenance cost except occasional replacement of canvas binding. They have proven more satisfactory and economical than the old style cotton net with wood posts. These outfits are neat and trim in appearance and remain so, adding to the attractiveness of the court.

There are no projecting bolt heads, screws or metal parts that cause injury to players or tennis balls; adopted as standard tennis equipment by many park and recreation systems.

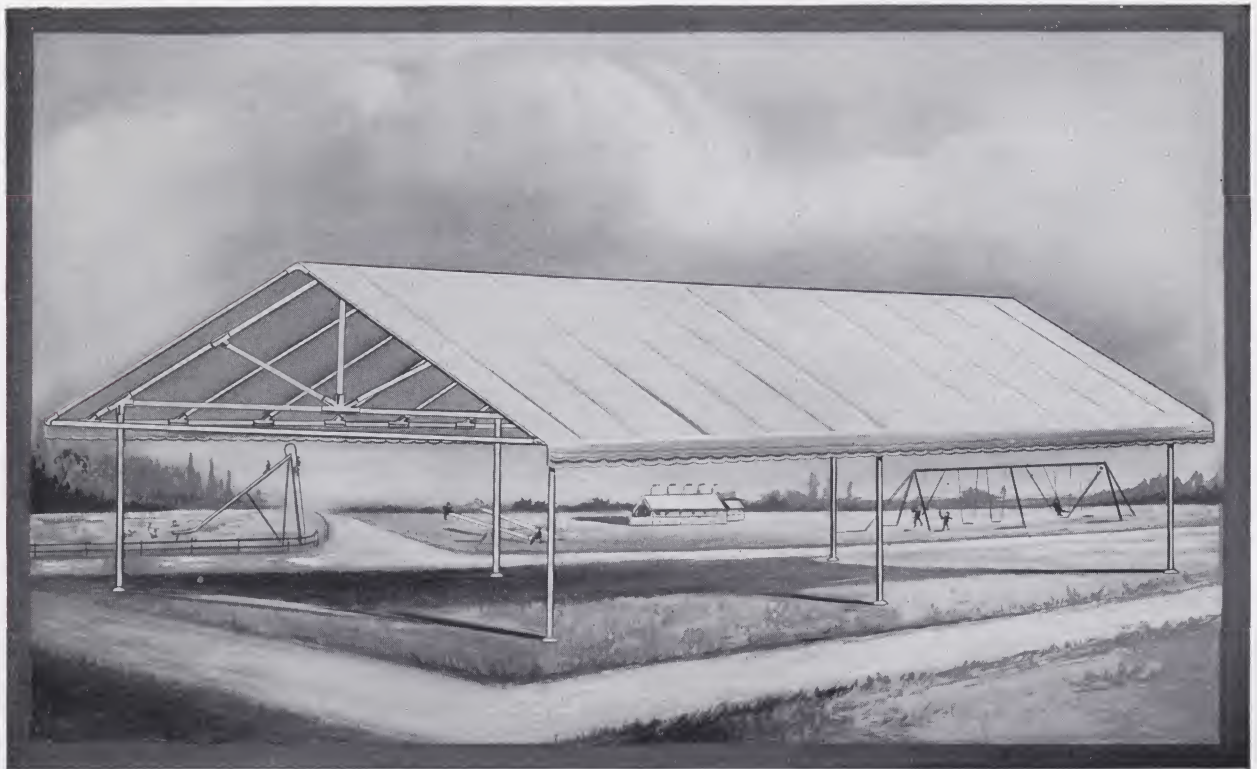
May be used upon clay, concrete or asphalt courts, and ideal when used with lights for night playing.

After erection it is not necessary to remove nets for winter. They are intended to be intact, in order, and always ready to use.

Direction and drawing sent for erection.

- | | |
|----------------------------------------------------------------------------------------------|----------|
| No. 106—Code—LIFAD—Net and posts with all fittings, complete, weight about..... | 315 lbs. |
| No. 107—Code—LIFDA—Net and fittings complete, except posts, weight about..... | 185 lbs. |
| No. 108—Code—LIFEFF —Posts (2) only, drilled and fitted with finish plugs, weight about..... | 130 lbs. |

*See Price List and Discount for Catalog No. 13
See page 37 for Swimming Pool Equipment*



Shelter Shed

PRIMARILY designed for public playgrounds, yet many other uses have been found, such as—sun and shower protection at country clubs, beaches, fairs, religious meetings and outdoor gathering places.

The frame is assembled and permanently set in concrete. We furnish only the fittings and pipe; all fittings best quality galvanized malleable iron; all pipe galvanized; canvas top and side walls obtained from other sources by the customer. This is a very strong, substantial frame and will satisfactorily serve its purpose for many years.

As playground shelter sheds, they are ideal as both

shower and sun protectors for the smaller children. Vocational classes, small apparatus, park benches, sand boxes, etc., are advantageously sheltered in this way.

Extreme height, 14 feet; from eaves to ground, 7 feet, 6 inches; extreme width 21 feet, 3 inches; length over all, 34 feet; distance, center to center of supports lengthwise, 15 feet; distance, center to center of supports crosswise, 17 feet; supports imbedded in concrete, 3 feet, 6 inches; ground space required 714 square feet. Four workmen can assemble and install the frame complete, in one day's time.

PIPE SPECIFICATIONS

2 Pieces—1½"	20'	4"	Threaded both ends
6 Pieces—1½"	11'	9¾"	Threaded both ends
3 Pieces—1½"	4'	6¾"	Threaded both ends
6 Pieces—1½"	4'	4⅝"	Threaded both ends
3 Pieces—1½"	16'	4"	Threaded both ends
6 Pieces—1½"	12'	3¼"	Plain ends
6 Pieces—1½"	16'	10"	2 Pcs. threaded both ends
			4 Pcs. threaded one end
16 Pieces—1"	11'	11½"	Threaded both ends
4 Pieces—1"	11'	9¾"	Plain ends

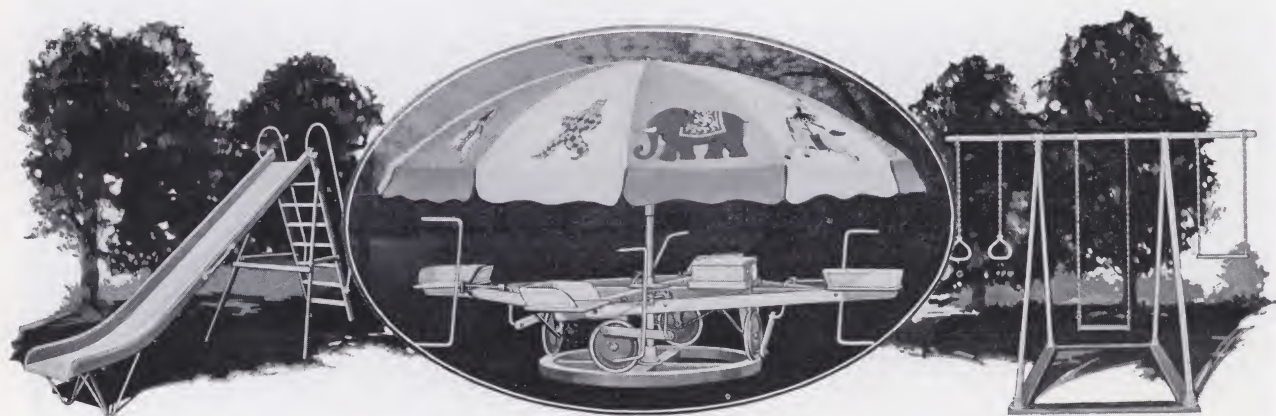
No. 2500—Code—MICZO—All fittings, no pipe, no canvas, weight about..... 850 lbs.

No. 2501—Code—MICZU—Galvanized pipe, cut to lengths, weight about.....1450 lbs.

See Price List and Discount for Catalog No. 13

See page 62 for recreation illumination

Home Yard Play Goods



OUR Home Yard Play Goods line consists of over one hundred items. While primarily designed for private home use, they serve well for kindergarten and other small children's institutions. They are not intended in any way to be used on public or school playgrounds.

The line consists of every known device that has proven safe and practical for children's outdoor health and pleasure.

Home yards equipped with these brightly painted, neat, and trim play goods, are a means of keeping the youngsters at home, away from dangerous streets and highways. These goods also promote selected playmates within exclusive environment. Few things appeal to parents and children more than a private playground or recreation place.

Home Yard Play Goods of proper design and construction create home attraction with outdoor health building fun and happiness.

These goods are distributed through most of the leading department, sporting goods, and children's stores, but should none be near you, we shall gladly send, upon request, a beautiful colored booklet covering the complete line.



"IT PAYS TO PLAY"

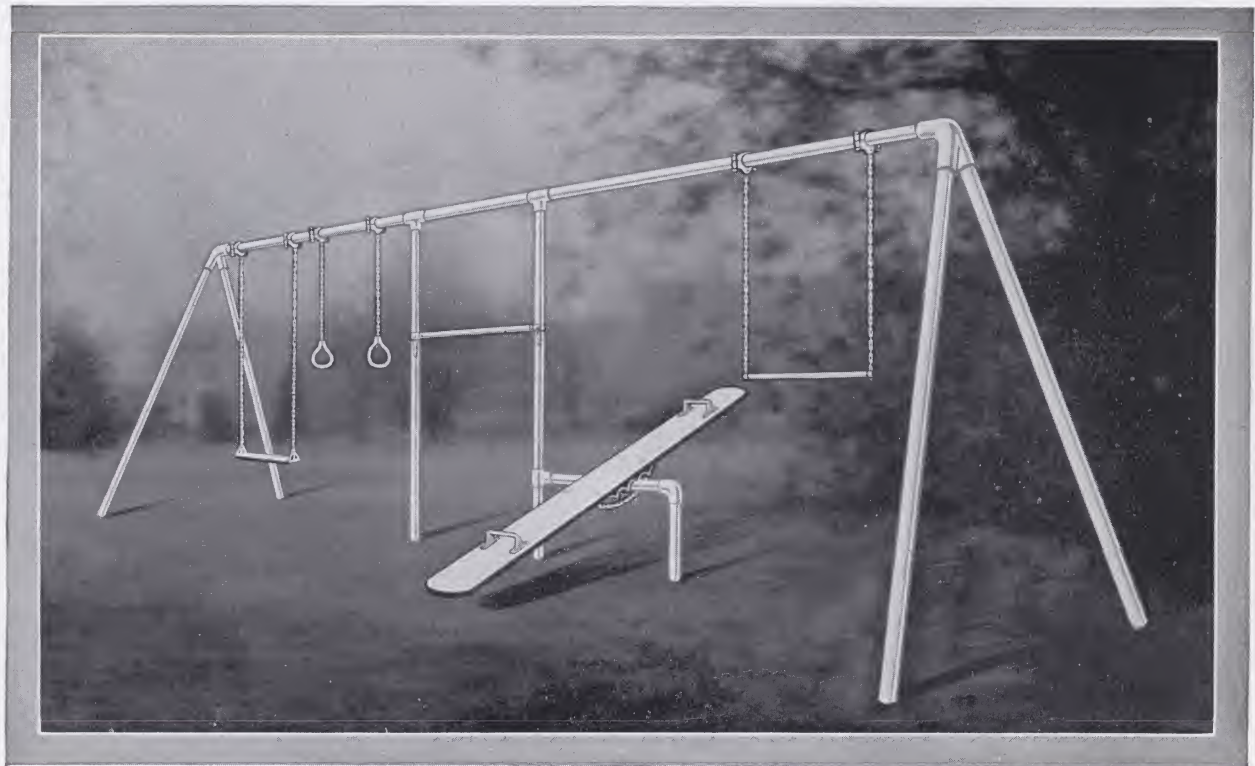
Pool and Beach Apparatus

OUR line consists of springboards, natatorium slides, pool ladders, hair dryers, life guard chairs and ninety other items presenting the most complete assortment of indoor and outdoor water sports apparatus, described and illustrated in the only catalog of its kind.

Outstanding architects and engineers recommend these products as the most essential composite feature of swimming pools, the majority of better class recreation centers being equipped with our apparatus.

We are the pioneers in this field. Our knowledge and experience together with superior construction features gained through three decades of manufacturing progressiveness are your guarantee of satisfaction. Send for our special catalog on Pool and Beach Apparatus.





Combination Set

A GOOD medium size gym and play outfit that is well suited for an estate in the country or a small community play lot. Country Clubs are also finding good use for them. Because of the nature of the apparatus here illustrated, it is possible to construct the frame entirely of 2-inch standard steel pipe except seesaw support which is 3 inch. Quite a saving in cost is thus possible, and ample strength assured. All apparatus is of standard approved public playground design and specifications—nothing better on the market.

Fittings and parts are of best quality malleable iron and are heavier than ordinarily used.

Swing with ball bearing hangers, special long link chains of 25,000 pounds tensile strength; solid cold-rolled steel trapeze, bars $1\frac{1}{8}$ inches in diameter, 4 feet in width and

smooth; a seesaw full 12 inches wide and 14 feet in length of 2-inch clear Oregon Fir, a pair of steel tube rings and steel bar trapeze comprise a most substantial outfit that will withstand no end of strenuous use on the part of youngsters and adults.

Height over all, 10 feet; length over all, 30 feet, width over all, 14 feet. Frame set in concrete.

Ground space required for safe use, 16 feet by 30 feet.

May be installed by one man in eight hours.

Pipe required—one piece 2-inch, 18 feet long; four pieces 2-inch 13 feet long; two pieces 2-inch $10\frac{1}{2}$ feet long; one piece 3-inch, $3\frac{1}{2}$ feet long; one piece 3-inch, 2 feet long.

No. 364—Code—LOSWA—All apparatus and fittings, no pipe, weight about.....225 lbs.

No. 365—Code—LOSYE —Galvanized pipe only, cut to lengths, weight about.....375 lbs.

See Price List and Discount for Catalog No. 13
See page 37 for Swimming Pool Equipment



Outdoor Gymnasium

THIS gymnasium has been a favorite for many years. Therefore, it is time-tried and proven.

Has capacity of eight children at a time using swings singly.

A very substantial frame supports the various pieces of apparatus, the overhead member being 3-inch standard steel pipe with vertical and angling supports of 2-inch steel pipe. These are connected by heavy malleable iron fittings of approved type which make a sturdy, rigid and safe frame.

Iron base flanges are provided for all braces and supports; these act as anchors and are imbedded in concrete.

The swings, rings and trapeze are all fitted with ball bearing hangers; horizontal bars are adjustable, and

anchors are furnished for lower end of steel climbing pole and flexible ladder; these also are imbedded in concrete.

Supplied with galvanized pipe and fittings.

Height over all, 14 feet; length over all, 56 feet; ground space required for apparatus, 25 feet by 60 feet.

Five men should make complete installation in twenty-five hours or less.

Pipe required—2 pieces 3-inch, 15 feet long; 1 piece 3-inch, 12 feet long; 10 pieces 2-inch, 17 feet long; 3 pieces 2-inch, 16 feet long.

Fittings required—2 pieces No. 157, 3-way end spread; 2 pieces No. 156 3-way center spread; 1 piece No. 153 3 x 2 tee; 13 pieces No. 171 base flanges.

No. 375—Code-LOUMV—All apparatus and fittings, no pipe, weight about..... 335 lbs.
No. 376—Code-LOUPY —Galvanized pipe, weight about.....1,075 lbs.

*See Price List and Discount for Catalog No. 13
See page 63 for installation requirements*



Outdoor Gymnasium

IN THIS we offer an outdoor gymnasium with unusually large capacity. The apparatus is well arranged as to safety, capacity and minimum frame work.

Capacity of nine children at a time, 60 "slides" per minute on slide and parallel sliding poles.

The flying rings (steel tube) and trapeze are entirely of steel and are supported by our high-grade ball bearing hangers, which are superior to the roller bearing. This apparatus is made entirely of steel and malleable iron, except the chute side rails, which are of hardwood, and hand finished.

The coaster chute is of the same general design and construction as our No. 450 slide. Chute bed way can be furnished of either hardwood or rust resisting metal. This is optional with customer, at no difference in cost.

Therefore, please state your wishes when ordering;

otherwise, we reserve the right to ship either type.

Sliding poles, guard rails and ladder, climbing poles, flexible ladders, slide stairway, trapeze rings and bars are all galvanized. Frame pipe galvanized.

Height over all, not including top guard rails, 14 feet; length over all, 45 feet; ground space required, 30 feet by 50 feet.

Five men should make complete installation in thirty hours. Frame imbedded in concrete.

Pipe required—2 pieces 3-inch, 17 feet long; 2 pieces 2-inch, 16 feet long; 3 pieces 3-inch, 15 feet long; 4 pieces 2-inch, 17 feet long.

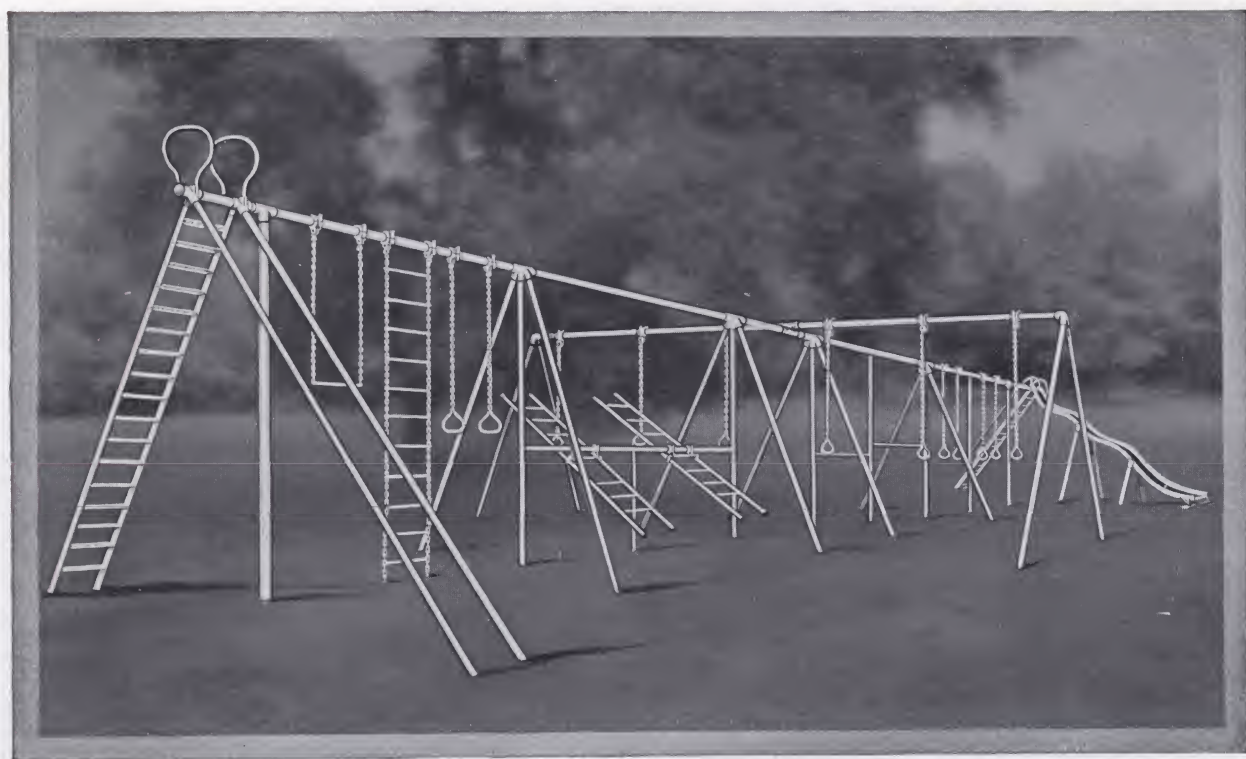
Frame fittings required—2 pieces No. 152; 1 piece No. 153; 1 piece No. 156; 1 piece No. 155; 2 pieces No. 173; 6 pieces No. 171; 2 pieces No. 237, finish plugs.

No. 380—Code—LOVBE —All apparatus and fittings, no pipe, weight about.....1,500 lbs.

No. 381—Code—LOVDO—Galvanized pipe, weight about..... 800 lbs.

See Price List and Discount for Catalog No. 13

See page 36 for Home Yard Play Goods



Large Outdoor Gymnasium

HERE we have illustrated our largest stock outdoor gymnasium. There is no limit to size, arrangement or amount of apparatus that may be incorporated in one of these outfits. Should you wish a special design, please consult us.

No. 385 is so arranged and constructed that it offers the greatest variety and capacity expected of one combination. In addition to the ordinary arrangement of supporting all of the apparatus in one line, we have included a cross frame for the support of a full size six traveling ring outfit. All rings and trapeze are supported by our improved type ball bearing hangers, which are very durable and practically noiseless.

This outfit is made entirely of steel and malleable iron, except the chute side rails and the teeter ladder grips, which are of hardwood. All rings, chains, bars, trapeze, guard rails, sliding poles and flexible ladder are galvanized. Chute is 30 feet long and of same design and construction as our No. 450 coaster slide. The chute bed way is furnished in either hardwood or rust resisting metal. Please state your choice when ordering; no difference in cost.

Height over all, not including top guard rails, 14 feet; length over all, 60 feet; width, 40 feet; ground space required, 50 feet by 70 feet.

Capacity other than slide, slide poles and traveling rings, eleven youngsters at a time; slide, slide poles and traveling rings, one hundred ten per minute.

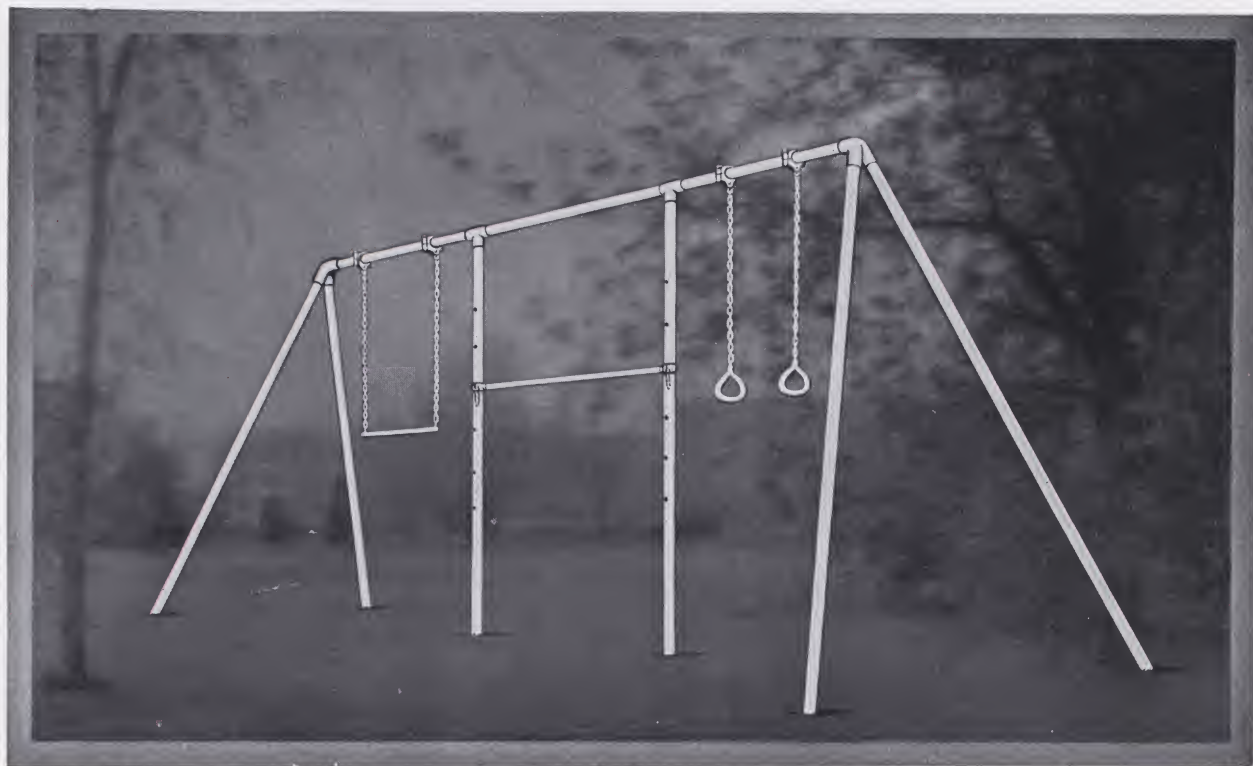
Pipe required—2 pieces 3-inch, 17 feet long; 1 piece 3-inch, 18 feet long; 2 pieces 3-inch, 20 feet long; 1 piece 3-inch, 12 feet long; 2 pieces 3-inch, 15 feet long; 12 pieces 2-inch, 17 feet long; 5 pieces 2-inch, 16 feet long; 1 piece 2-inch, 10 feet long; 1 piece 2-inch, 8 feet long.

Frame fittings required—2 pieces No. 152; 1 piece No. 158; 18 pieces No. 171; 2 pieces No. 164; 3 pieces No. 154; 2 pieces No. 173; 4 pieces No. 156; 2 pieces No. 237; 1 piece No. 153. Frame imbedded in concrete.

Five workmen should be able to make installation complete with a total of fifty hours' work.

No. 385—Code-LOVOD—All apparatus and fittings, no pipe, weight about.....2,000 lbs.
No. 386—Code-LOVUF—Galvanized pipe, cut to lengths, weight about.....2,000 lbs.

*See Price List and Discount for Catalog No. 13
See page 37 for Swimming Pool Equipment*



Triplex Combination

THIS is one of the most popular of our Combination Sets and has the general endorsement of school and recreation officials throughout the country. In fact this combination was suggested by the Iowa State Board of Education.

Quite a saving to the customer is made possible due to the construction of this set. The frame is of 2-inch standard steel pipe, which makes possible the utmost rigidity.

It is absolutely safe under the most strenuous use and is moderately priced.

This is a very desirable, muscle-developing, health-building, outdoor gymnasium set that may be used on the home lawn as well as on the small school playground. Those that are fortunate in having sufficient lawn space

will find this an excellent buy and it will prove a joy to all members of the family. The bar is solid, cold rolled steel, galvanized, $1\frac{1}{8}$ inches in diameter, 6 feet in length (our standard approved bar), adjustable to any desired height by means of substantial malleable iron clamps.

Height over all, 10 feet; length over all, 25 feet; width over all, 12 feet.

Set in concrete.

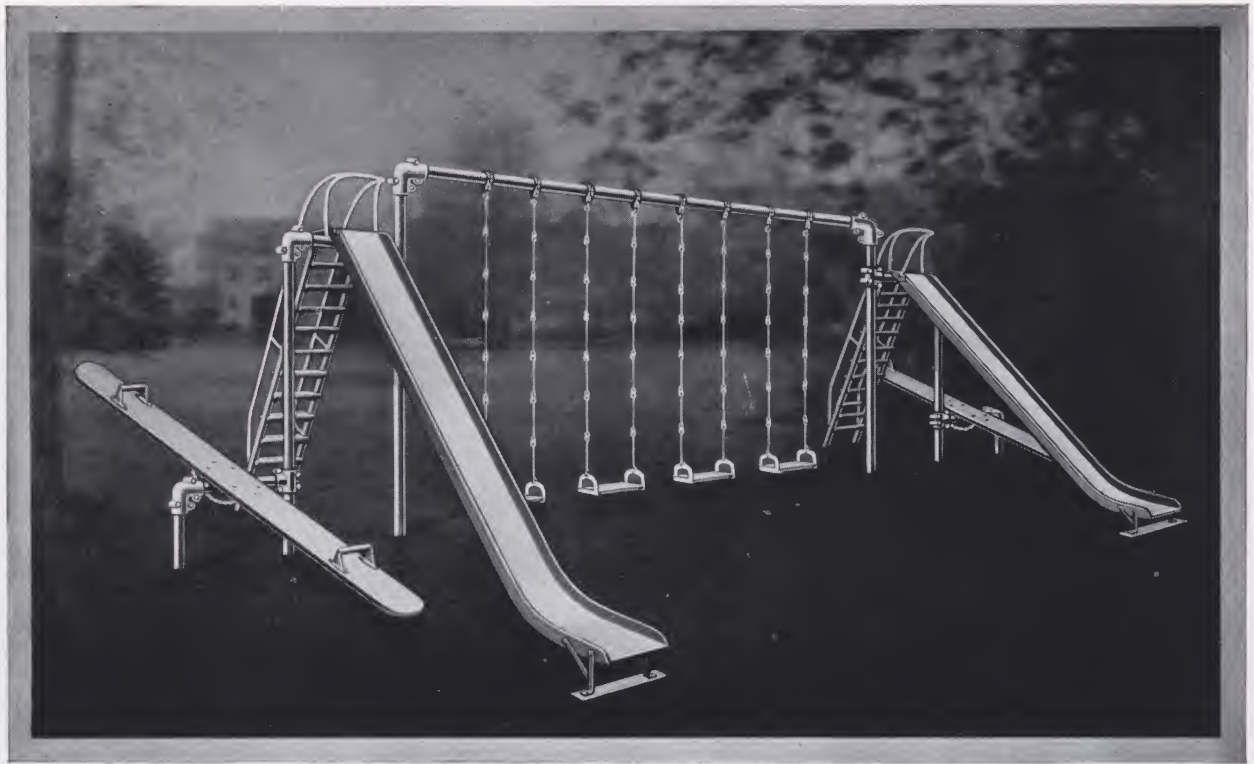
Space required for use, 15 feet by 30 feet.

Two men can make installation in five hours.

Pipe required—one piece 2-inch, 15 feet long; four pieces 2-inch, 13 feet long; two pieces 2-inch, 12 feet long, drilled for bar.

No. 367—Code—LOTEZ—All apparatus and fittings, no pipe, weight about.....125 lbs.
No. 368—Code—LOTIB—Galvanized pipe, cut to lengths, weight about.....300 lbs.

*See Price List and Discount for Catalog No. 13
See page 63 for installation requirements*



Duplex Combination

A VERY popular play station for the boys and girls.

Owing to the design of this combination, it is possible to construct it with a minimum amount of frame pipe, hence the low cost.

The frame is entirely of 3-inch standard steel pipe. The slide stairways follow our standard construction, having malleable iron steps, steel tube risers, with galvanized steel guard rails. The lower ends of these stairs are provided with anchors for imbedding in concrete.

The chutes can be furnished with either hardwood or rust resisting metal bed ways at no difference in cost. We ask that customer please state his choice.

Swings are supported by ball bearing swing hangers—the best swing hangers ever devised. Swing chains are of the approved long link type used in connection with our new style swing stirrup and hardwood seat board.

Seesaw boards and fittings are the same as used on our large four-board outfit No. 230; all fittings best quality malleable iron, approved design. This outfit is set in concrete; base flanges furnished which act as anchors.

This combination is a very good value and is guaranteed to give the best service and satisfaction.

Capacity, eight children at a time, plus 120 "slides" per minute on the two chutes.

Height over all, 10 feet; height slide top platforms, 8 feet; chute, 16 feet long; length of swing frame proper, 16 feet; length of apparatus over all, 28 feet; ground space required, 30 feet by 35 feet.

Three men should make installation in fifteen hours.

Pipe required—1 piece 3-inch, 16 feet long; 2 pieces 3-inch, 13 feet long; 2 pieces 3-inch, 10 feet long; 4 pieces 3-inch, 3 feet long; 2 pieces 3-inch, 5 feet long.

- No. 389—Code—LOWAB—All apparatus and fittings with straight chutes, as illustrated, no pipe, shipping weight about.....1,200 lbs.
No. 390—Code—LOWBA—Same as No. 389, except with wave chutes, no pipe, shipping weight about1,225 lbs.
No. 391—Code—LOWEC—Galvanized pipe, cut to lengths, weight about..... 650 lbs.

See Price List and Discount for Catalog No. 13

See page 37 for Swimming Pool Equipment



School Combination

AN OUTFIT particularly well designed for small institutions and playgrounds. It combines such a wide assortment of apparatus for so small amount of frame pipe. As a result, it is moderate in price and a very good value.

This outfit is set in concrete, well braced with pipe of ample strength, connected by heavy malleable iron fittings, making a frame of extraordinary strength and rigidity. Chute is 20 feet in length and furnished with either hardwood or rust resisting metal bed way. The choice is optional with customer, at no difference in cost. Please state choice when ordering.

Trapeze, rings, flexible ladder, swing, bar and seesaw are all standard approved apparatus, the same as used on our larger gymnasium combination outfits. Slide stairway is steel and malleable iron, with galvanized steel handrail; ball bearing hangers used with trapeze rings and swing. Horizontal bar is solid cold-rolled steel, plated and polished, adjustable as to height; see-

saw board dressed smoothly, with rounded edges, made from select stock, 2 inches thick, 12 inches wide, 14 feet long and well painted; fitted with adjusting fulcrum irons under boards; pipe collar maintains position of board on frame; malleable iron grips galvanized and well bolted. Please note angular braces under slide chute have been discontinued.

Capacity, seven children at a time, plus 60 "slides" per minute.

Height over all, 10 feet; length over all, 29 feet; ground space required, 30 feet by 40 feet.

Two men should be able to make complete installation in less than ten hours.

Pipe required—1 piece 3-inch, 20 feet long; 1 piece 3-inch, 13 feet long; 1 piece 3-inch, 8 feet long; 1 piece 3-inch, 5 feet long; 1 piece 3-inch, 3 feet long; 2 pieces 2-inch, 13 feet long; 1 piece 2-inch, 12 feet long.

No. 370—Code—LOTUD—All apparatus and fittings, no pipe, weight about.....860 lbs.
No. 371—Code—LOTYA—Galvanized pipe, cut to lengths, weight about.....490 lbs.

See Price List and Discount for Catalog No. 13

See page 36 for Home Yard Play Goods



Rural Special Combination

THIS outfit, especially designed and constructed for rural schools, is also ideal for small institutions.

Because of the unusually low price at which it is offered, this set has already become one of our best sellers notwithstanding the fact it has been on the market but a short time.

The same basic principles of construction, quality and workmanship incorporated in all our numbers, are continued in this outfit. We present it to the trade with the broadest guarantee of satisfaction.

All apparatus required with this set is standard equipment, consisting of the following: Sixteen foot slide, rock maple side rails (customer has choice at no difference in cost of either Armco rust-resisting metal or rock maple splinter-proof bed ways); one pair galvanized

steel tube flying rings; two swings, improved stirrups which prevent seat warping and short link machine made chains; and solid cold-rolled steel trapeze $1\frac{1}{8}$ inches in diameter and smooth, all apparatus suspended from ball bearing hangers.

Height over all, 8 feet; length over all, 24 feet, 9 inches; width over all, 10 feet, $3\frac{1}{2}$ inches.

Ground space required for use 16 feet by 30 feet. May be installed in eight hours by one man. Frame imbedded in concrete.

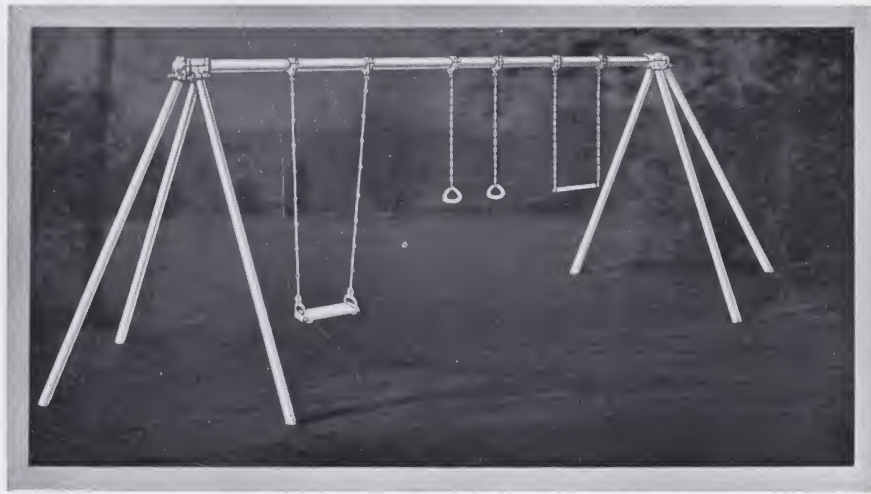
An all-metal stairway, with safety guard rail, is furnished with the slide.

Pipe required—one piece, 3-inch, 20 feet long; 3 pieces, 2-inch, 10 feet long; 1 piece, 3-inch, 11 feet long.

No. 373—Code—LOUKS—All apparatus and fittings, weight about.....	740 lbs.
No. 374—Code—LOULT—Galvanized pipe, cut to length, weight about.....	335 lbs.

See page 62 for recreation illumination equipment

Junior Combinations



AN outfit that is bought frequently for back-yard installation; requires small space; is not expensive. Keeps the children at home off the streets and provides excellent exercise. It is substantial enough for small school playgrounds. Swings, rings and trapeze hung from ball bearing hangers; all apparatus galvanized and of standard approved type.

Pipe fittings extra heavy malleable iron; frame set in concrete; base flange anchors furnished. Pipe galvanized iron.

Pipe required—one piece 2-inch, 13 feet long; six pieces 1¼ inch, 10 feet long.

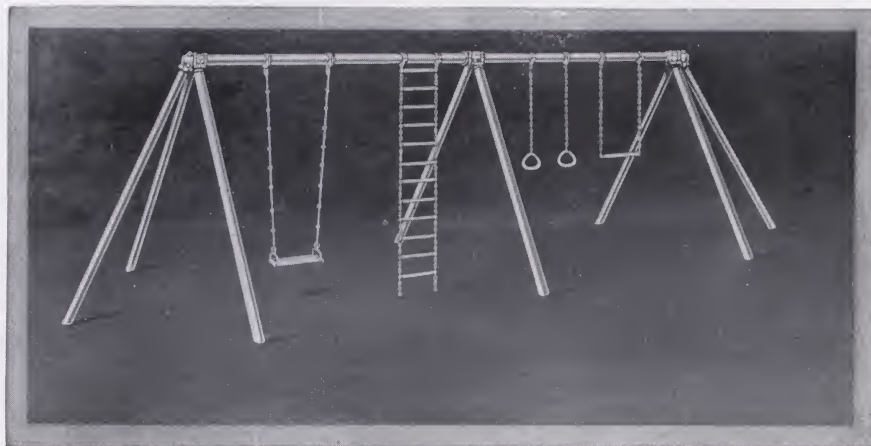
Ground space required—18 feet by 25 feet.

Height over all, 8 feet; length over all, 22 feet; width 10 feet.

One man should make installation in five hours.

No. 340—Code—LOORZ—All apparatus and fittings, no pipe, weight about.....110 lbs.

No. 341—Code—LOOSB—Galvanized pipe, cut to lengths, weight about.....200 lbs.



SIMILAR to our No. 340, shown above; the only difference is the addition of an all-steel flexible ladder. The price is only slightly higher than that of the No. 340.

More children accommodated.

Frame imbedded in concrete.

Two men should make installation in four hours.

Height over all, 8 feet; width 10 feet; length over all 36 feet.

Space required for use, 18 feet by 30 feet.

Pipe required—one piece 2-inch, 17 feet long; eight pieces 1¼-inch, 10 feet long.

No. 345—Code—LOPET—All apparatus and fittings, no pipe, weight about.....140 lbs.

No. 346—Code—LOPIV—Galvanized pipe, cut to lengths, weight about.....290 lbs.

See Price List and Discount for Catalog No. 13

See page 62 for recreation illumination

Junior Combinations



DESIGNED especially for small children; to be used either at home or on public playground. All apparatus used is standard approved.

Equipped with ball bearing swing hangers and malleable iron overhead fittings.

Three types of swings are suggested, i. e., Standard, Chair and Scup.

Any other assortment can be furnished at same cost.

Capacity—three children at a time.

One man should make installation in four hours.

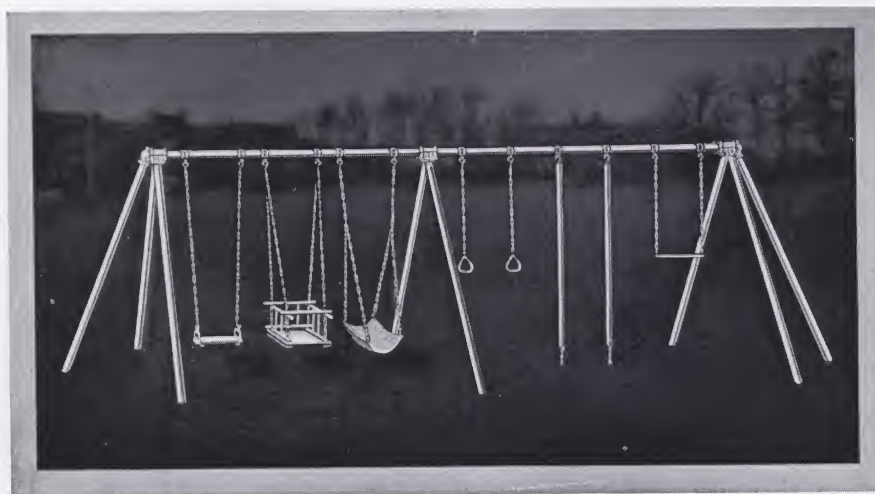
Height over all, 8 feet; length over all, 22 feet.

Ground space required—18 feet by 25 feet. Space required for use, 35 feet by 35 feet.

Pipe required—one piece 2-inch, 13 feet long; six pieces 1¼-inch, 10 feet long.

Frame set in concrete.

No. 350—Code—LOPWO—All apparatus and fittings, no pipe, weight about.....100 lbs.
No. 351—Code—LOPZY —Galvanized pipe, cut to lengths, weight about.....210 lbs.



THIS combination is twice as large as our No. 350 shown above and the capacity is doubled. Apparatus on this frame will accommodate small babies in the scup and the vigorous young athlete on the rings or trapeze. An ideal assortment for the small community playground; all swinging apparatus provided with noiseless ball bearing hangers. We have never been advised of any piece of this outfit wearing out.

Height over all, 8 feet; length over all, 34 feet; width, 10 feet. Frame set in concrete. Iron base flanges included in price.

Ground space required for use, 18 feet by 37 feet.

Pipe required—two pieces 2-inch, 13 feet long; eight pieces 1¼-inch, 10 feet long.

Two men should make installation in less than seven hours.

No. 355—Code—LOROZ—All apparatus and fittings, no pipe, weight about.....160 lbs.
No. 356—Code—LORUB—Galvanized pipe, cut to lengths, weight about.....350 lbs.

See Price List and Discount for Catalog No. 13

See page 63 for installation requirements



Baby Scup Set

BABIES like to swing out of doors in the fresh air and invigorating sunshine as well as the kiddies and thousands of them get their daily sun baths in these scups.

Illustrated above is the standard three scup set. It is possible to arrange frames and fittings for larger sets. Send for prices and other information on special outfits.

The frame is imbedded in concrete. Base flange anchors are included in price. All fittings and hangers of approved type, heavy galvanized iron. Furnished with either ball bearing or plain bearing hangers.

Canvas scups, with galvanized steel frames and chains, are regular equipment and covered by price list.

Space required for use not less than 18 feet by 25 feet. Doctors and child health authorities recommend this outdoor form of treatment and divertimento for babies.

Capacity three babies at a time.

We suggest this being used under our Shelter Shed, described and illustrated on page 35.

Height over all, 8 feet; length over all, 21 feet; width 12 feet.

Two workmen should make installation in four hours.

Pipe required—one piece 2-inch, 13 feet long; six pieces, 1¼-inch, 10 feet long.

An asset to any playground.

No. 330B—Code—LONIT —Apparatus with ball bearing hangers, no pipe, weight about.....	100 lbs.
No. 331B—Code—LONOV—Apparatus with plain bearing hangers, no pipe, weight about.....	95 lbs.
No. 332B—Code—LONRA—Galvanized pipe, cut to lengths, weight about.....	300 lbs.

See Price List and Discount for Catalog No. 13

See page 36 for Home Yard Play Goods



Chair Swing Outfit

BUILT especially for the little tots with the factor of safety predominating.

Chair seats are of hardwood, filled and varnished in natural color; no paint to discolor clothing.

Safety round wood bar $1\frac{1}{4}$ inches in diameter, slides easily up the front chains, permitting entrance to seat. Bar falls back in place across the lap, making it safe for the little ones. Four small link, machine-made, galvanized chains support each chair. This construction is not only more durable, but prevents the chairs from tilting to a dangerous angle.

Supplied with either ball bearing or plain bearing swing hangers. For best results we recommend the ball bearing hangers, which cost but slightly more.

Pipe required—one piece, 2-inch, 13 feet long; six pieces, $1\frac{1}{4}$ -inch, 10 feet long. Space required for use,

18 feet by 25 feet. Height over all 8 feet.

Frame set in concrete.

Base flange anchors included in price.

All overhead fittings of standard approved type, best quality heavy malleable iron.

Should be installed by two men in four hours.

A very popular number for the little tots and a convenience in parks much appreciated by parents.

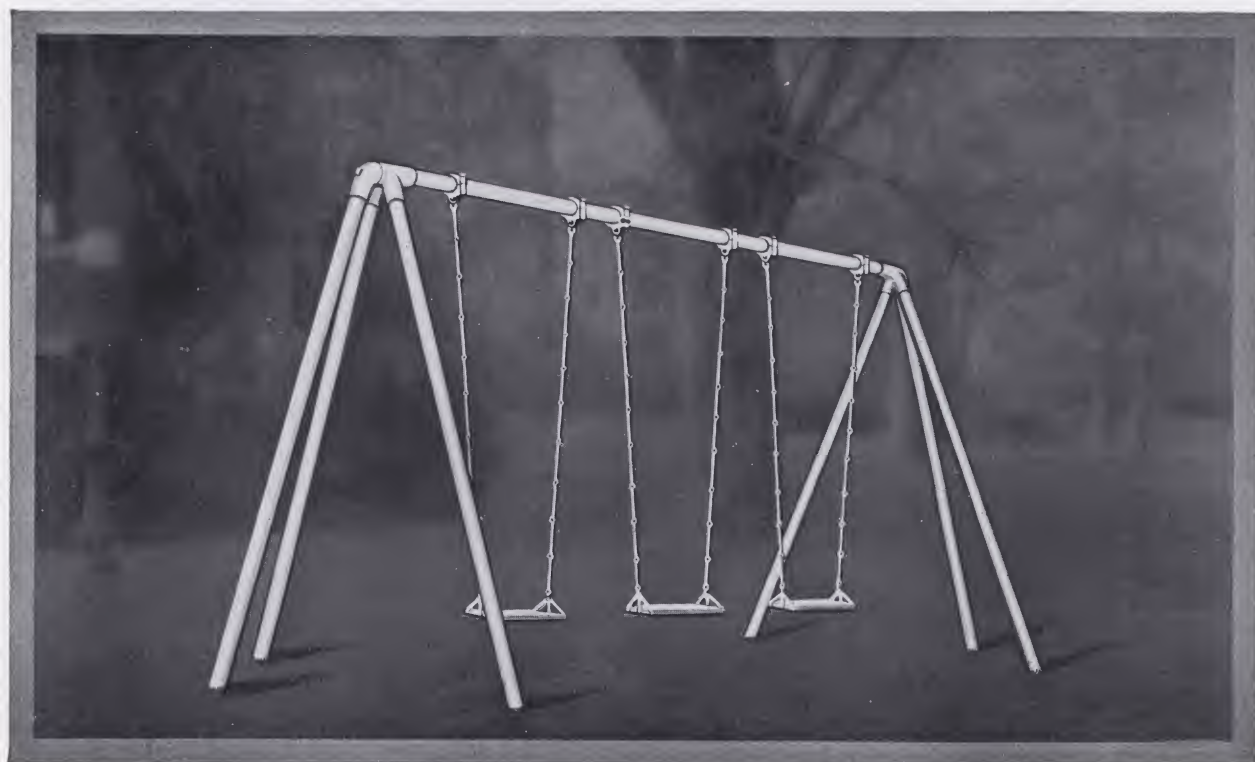


Chair Swing

No. 337—Code—LOOGN—With ball bearing hangers, all apparatus and fittings, no pipe, weight about	125 lbs.
No. 338—Code—LOOLS —With plain bearing hangers, all apparatus and fittings, no pipe, weight about	118 lbs.
No. 339—Code—LOONV—Galvanized pipe, cut to lengths, weight about	300 lbs.

See Price List and Discount for Catalog No. 13

See page 37 for Swimming Pool Equipment



Three Swing Outfits

THE No. 313 Standard Swing Outfit is considerably heavier and stronger than the average. In the many years we have been making them not an injury has been reported, nor do we know of any having worn out. This is a smaller edition of our No. 310.

We wish to call your attention to the overhead pipe. It is full 3-inch standard pipe and the six supports are 2-inch standard pipe; the swing hangers are the double race, self-contained ball bearing type. There is no better buy.

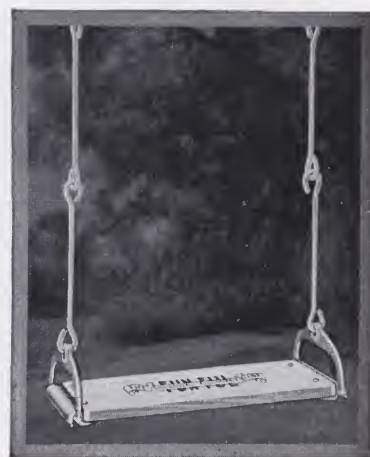
Long link swing chains and improved swing stirrups are furnished, such as are used on No. 310. Height over all, 12 feet; length over all, 25 feet; width over all, 12 feet; ground space required for use, 30 feet by 30 feet.

Frame pipe required—one piece, 3-inch, 15 feet long; six pieces, 2-inch, 15 feet long.

No. 313-B follows same construction as No. 313 except that it is 8 feet in height, length over all, 22 feet; width, 10 feet. Pipe required—one piece 2-inch, 13 feet long; six pieces 1¼-inch, 10 feet long. Ground space required for use, 25 feet by 40 feet.

Frame set in concrete; base flange anchors included in price.

Two work men should make complete installation in six hours.

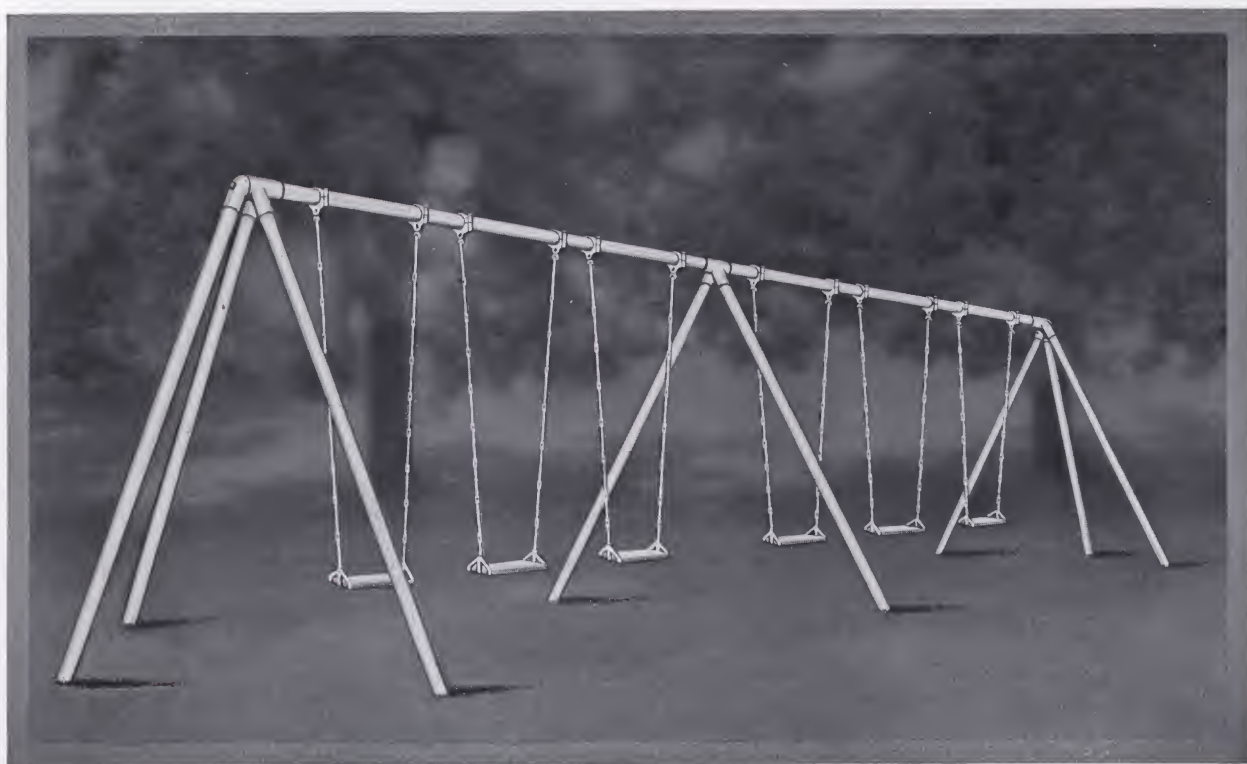


Standard swing

No. 313 —Code-LOKRO—All apparatus and fittings, no pipe, weight about.....	160 lbs.
No. 314 —Code-LOKUS—Galvanized pipe, cut to lengths, weight about.....	435 lbs.
No. 313B—Code-LOKRE—All apparatus and fittings, no pipe, weight about.....	125 lbs.
No. 314B—Code-LOKRI —Galvanized pipe, cut to lengths, weight about.....	200 lbs.

See Price List and Discount for Catalog No. 13

See page 63 for installation requirements



Standard Swing Outfits

SWINGS are a necessary part of every playground; simple apparatus that must be strong and safe and function properly. Our swings comply with public playground requirements.

No. 310, as shown above, furnished with noiseless, self-contained, double race ball bearing hangers; chain links eleven inches in length, $\frac{3}{8}$ -inch round steel wire of great tensile strength; special heavy galvanized iron flexible swing stirrups supporting seat board full width; all frame fittings heavy malleable iron hot galvanized.

Height, 12 feet; length, 42 feet; ground space for use, 30 x 45 feet; set in concrete.

Pipe required—two pieces, 3-inch, 15 feet long; eight pieces, 2-inch, 15 feet long.

No. 327 follows same construction as No. 310 except that it is 10 feet in height with eight braces and with four swings, using short link chain.

Length over all, 29 feet, space required for use, 14 x 29 feet; set in concrete.

Pipe required—one piece, 2-inch pipe, 18 feet long; eight pieces, $1\frac{1}{2}$ -inch pipe, 13 feet long. All pipe cut to measure.

No. 310—Code—LOKNA —Six Swings and all fittings, no pipe, weight about.....	250 lbs.
No. 311—Code—LOKOR —Galvanized pipe, cut to lengths, weight about.....	650 lbs.
No. 327—Code—LOMUV —Four Swings, all fittings, no pipe, weight about.....	125 lbs.
No. 328—Code—LOMWY—Galvanized pipe, cut to lengths, weight about.....	350 lbs.

See Price List and Discount for Catalog No. 13

See page 37 for Swimming Pool Equipment

Basket Ball Backstop

OWING to the tremendous interest displayed in basket ball, and the demand for good backstops, we have developed this one. It complies with the rules and regulations of the game. You need offer no apology for having two or more of these on your school ground or public playground, as they are neat and trim. They are set in concrete, and they will maintain a vertical position indefinitely. In the long run they are considerably cheaper than the ordinary homemade affair. The backstop proper is framed with heavy hardwood, well braced and bolted, faced with heavy perforated galvanized steel sheets, all being clamped to 3-inch pipe support. Backstop is perforated to reduce wind pressure, also to add to the appearance. Installation time, one man 6 hours per pair.

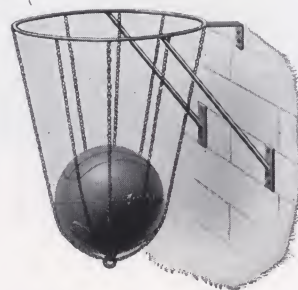
No. 280—Code—LOFJA—Pair backstops with fittings, but no goals or pipe, weight about200 lbs.

No. 283—Code—LOFYP—Pair galvanized steel, 3-inch pipe, each 17 feet long, up-rights with base flanges and caps, weight about.....242 lbs.

Goals and Nets

(Outdoor)

IT IS a well-known fact that both cotton and leather nets for basket ball goals endure for a very short time out in the weather. We have, therefore, designed this special goal, using galvanized chain for the net; official in every respect.



Please note the following features:

1. Chain net attached substantially to the ring, leaving no projections, thus making an absolutely smooth surface of the ring.
2. By arranging chains in loops, which pass through ring at bottom, there is no possibility of a tangle.
3. When the ball drops into basket it hesitates momentarily and then rolls out; no chance of error in decision on part of referee.
4. Economy—costs less than leather and only a little more than cotton, and will outwear several of either.
5. By use of smooth chain, wear on ball is minimized.
6. May be used indoors at a great saving; in fact, is already in use as official goal in some Y. M. C. A.'s. Regular cotton net is furnished if desired.

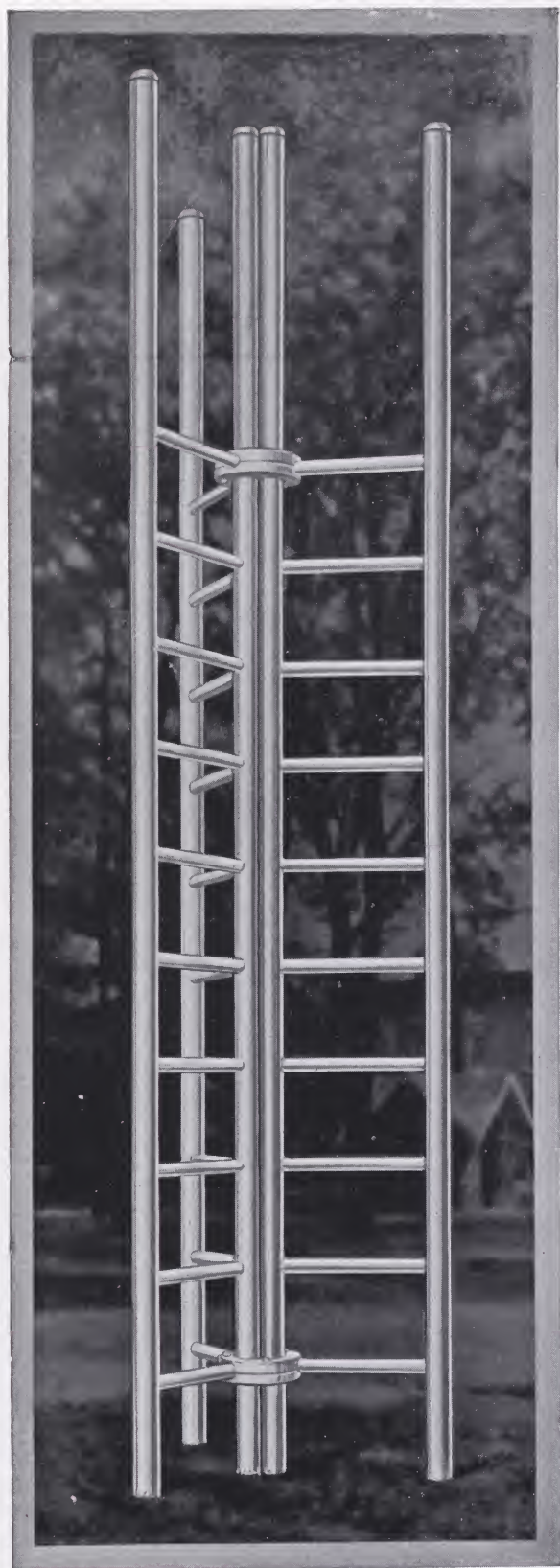
No. 281—Code—LOFKE—Pair official goals only, with cotton net, weight about..... 18 lbs.

No. 282—Code—LOFMO—Pair special chain net goals, weight about 25 lbs.

NOTE—Basket ball backstops and goals quoted by the pair. Ten feet from goal rim to ground. Regulation outdoor basket ball court, 60 feet by 94 feet.



See Price List and Discount for Catalog No. 13
See page 36 for Home Yard Play Goods



Tree Climb

THIS number, commonly known as a tree climb, only recently has leaped into universal favor. Its popularity is such that recreation, park, and school authorities are cognizant of the fact that no playground is complete without the tree climb.

There are absolutely no maintenance problems. The ground space required is practically nil.

This apparatus will support as many children as can find room on the three ladders comprising the outfit. It is designed to accommodate children of all ages. There are no projections which might injure the children or tear their clothing.

Neat and trim, the ladder rungs, pipe and fittings are constructed entirely of steel and malleable iron, all hot galvanized.

It is one of the most durable numbers shown in the FUN-FUL line. There are no moving parts which might become dangerous with continuous use.

The apparatus is imbedded in a single concrete base 12 inches deep and 4 feet in diameter, and is set flush with the ground.

It is generally known that in all children there is a certain amount of pent-up energy which manifests itself similarly to those instincts so characteristic of the monkey.

The tree climb is the logical apparatus for this enjoyable health building, muscle developing exercise.

This number is 10 feet, 6 inches above the ground, 40 inches in width and all vertical pipe is 1 1/4 inches, inside measurement.

Two men can make installation in three hours.

No. 245—Code—LOAHL—Complete, ready for shipment,
weight about220 lbs.

See Price List and Discount for Catalog No. 13
See page 37 for Swimming Pool Equipment



Flagstaff

PATRIOTISM demands that every school, playground or recreation center have Old Glory flying from a standard flagstaff. Every school in every state in the Union, in order to procure a perfect score, must have a flagstaff.

It behooves every recreation official as well as school authority to see that the various units under his supervision are equipped with a flagstaff. There is nothing to compare with the majestic touch given a recreational center as that of the American flag floating in the breeze, securely fastened to a durable hot galvanized iron staff, such as illustrated at left.

There is no possible chance of chain or rope halyard becoming fouled, as is the case with the conventional type, because the halyard moves over an absolutely smooth oval shaped radius beneath the ball, which is protected from the elements. There is no pulley to be oiled, no moving parts to function unsatisfactorily.

We use the special clamp type joint fittings exclusively, no threaded pipe being employed, therefore pipe is not weakened to that extent. Staffs can be furnished in any height up to 100 feet. Base flange anchors are set in concrete. Chain or rope halyards furnished extra.

FITTING SETS

No.	Code	Height above ground	Depth in ground	Lowest section pipe	Ball	Weight Lbs.
1900	MEZEP	20 feet	3 feet	2 in.	3 in.	20
1901	MEZES	30 feet	4 feet	2 ½ in.	4 in.	35
1902	MEZEU	40 feet	4 feet	3 in.	5 in.	60
1903	MEZEW	50 feet	5 feet	3 ½ in.	6 in.	90
1904	MEZEY	60 feet	5 feet	3 ½ in.	7 in.	105

PIPE REQUIREMENTS

No.	Code	1st Section	2nd Section	3rd Section	4th Section	Weight Lbs.
1900 Pipe	MEZER	2 " x 15'	1 ¼" x 8'			76
1901 Pipe	MEZET	2 ½" x 21'	1 ½" x 14'			168
1902 Pipe	MEZEV	3 " x 20'	2 " x 14'	1 ¼" x 10'		222
1903 Pipe	MEZEX	3 ½" x 20'	2 ½" x 13'	2 " x 12'	1 ½" x 10'	334
1904 Pipe	MEZEO	3 ½" x 20'	3 " x 15'	2 " x 15'	1 ½" x 15'	394

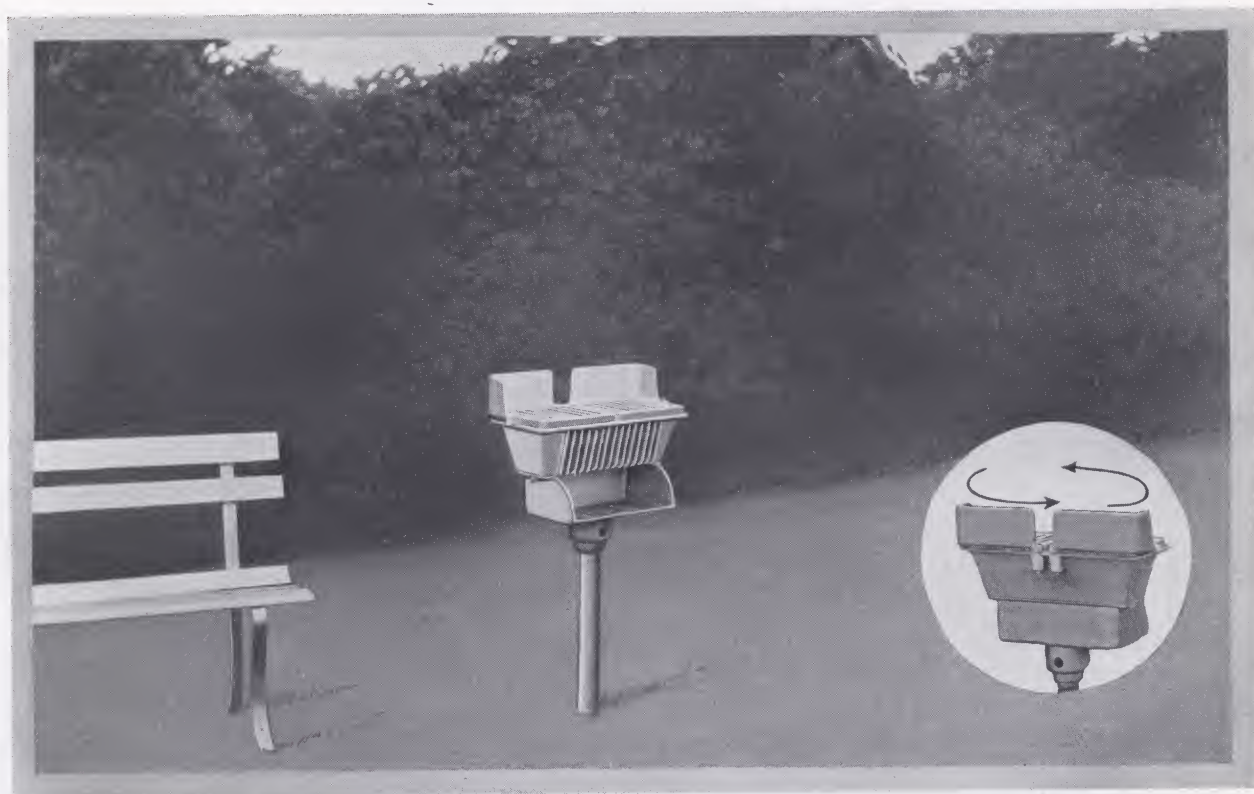
HALYARDS

No.		
1920 Chain	MEZRA	for poles numbered 1900 to 1904, inclusive.
1921 Rope	MEZPA	for poles numbered 1900 to 1904, inclusive.

Anniversaries on Which the American Flag Should Fly at Full Staff

Feb. 12	Lincoln's Birthday	Sept. 13	"Star Spangled Banner" (Baltimore)
Feb. 22	Washington's Birthday	Sept. 23	Paul Jones Day
April 17	Jefferson Day	Oct. 12	Columbus Day
April 19	Battle of Lexington (Patriot's Day)	Oct. 17	Battle of Saratoga
*May 30	Memorial Day	Oct. 19	Surrender at Yorktown
June 14	Flag Day	Nov. 11	World-War Armistice Signed
June 17	Battle of Bunker Hill	Nov. 25	Evacuation Day (New York)
July 4	Independence Day		
Sept. 6	LaFayette Day		

*On Memorial Day, May 30, the flag should fly at half staff from sunrise to noon and full staff from noon to sunset.



Hill Grill

An Entirely New Item in Camp and Picnic Cooking Equipment

THIS grill is built with pipe support so that the desired height may be easily attained. Equipment is made of cast iron, substantial and well built. The entire unit revolves on pipe support so that draft may be regulated in accordance with the direction of wind, an important feature. Pipe support should be set in ground with concrete about it.

The Hill Grill has many very desirable features such as large grate area, bottom and front; very heavy sliding grills which, if desired, may be slid back and cooking done on the live coals; wind shields that control and conserve heat; ash receptacle under grates that prevents flying sparks and litter, and also serves for baking

potatoes or for other uses. There is a simple device underneath the grill that prevents removal by vandals or thieves.

Hardwood, coal or charcoal may be used as fuel. We consider the ideal arrangement to be—kindling wood with charcoal as fuel. With one filling of charcoal, a clean, hot, smokeless fire may be maintained for one hour.

Dimensions: Length over all, 25½ in. Width over all, 10¾ in. Depth of fire box, 5 in. Height of grill surface above support, 16 in. Height of wind shield above grill surface, 4 in. Height of grill surface above ground is optional. We suggest 24 to 30 in.

No. 395—Hill Grill complete with support pipe, weight packed for shipment, about.....140 lbs.

See page 62 for recreation illumination equipment



Portable Jump and Vault Standards

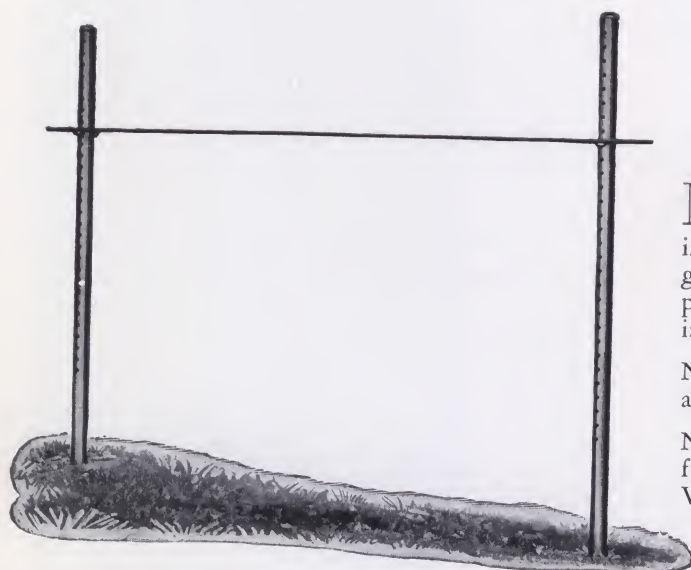
SUITABLE for indoor use; complies with athletic rules and regulations throughout the United States; substantially made and nicely finished.

No. 272—Code—LOENS—Portable Wood Jump Standard, 6 feet high, heavy metal base, 1 inch graduations;

special adjusting pins; complete weight about.....50 lbs.

No. 273—Code—LOEPT—Portable Vault Standards, same as No. 272, except 12 feet high; weight about75 lbs.

Vault pole not included; bamboo gauge stick not furnished.



Fixed Jump and Vault Standards

MADE of 2-inch pipe vertical standards galvanized inside and out; base flange anchors furnished for imbedding in concrete; upper ends of pipe fitted with galvanized finished caps; holes drilled for gauge stick pins, 2 inches apart. One man should make complete installation, either type, in two hours.

No. 270—Code—LOEFK—Fixed Jump Standard, 6 feet above ground, complete, weight about.....70 lbs.

No. 271—Code—LOEJN—Fixed Vaulting Standard, 12 feet above ground, complete, weight.....120 lbs. Vault pole not included; gauge stick not furnished.

See Price List and Discount for Catalog No. 13
See page 37 for Swimming Pool Equipment



Horizontal Bar Outfit

THIS is an excellent piece of apparatus for anyone's backyard and will afford good, healthful exercise for young and old alike; approved by park and playground authorities.

No. 275, as illustrated, is constructed with 2-inch galvanized pipe uprights and 1½-inch tubular braces.

Space required for use—12 by 12 feet.

One man should make installation in four hours.

No. 274 is without braces, but with 3-inch galvanized pipe uprights; this type occupies less space. Space required for use 12 by 12 feet.

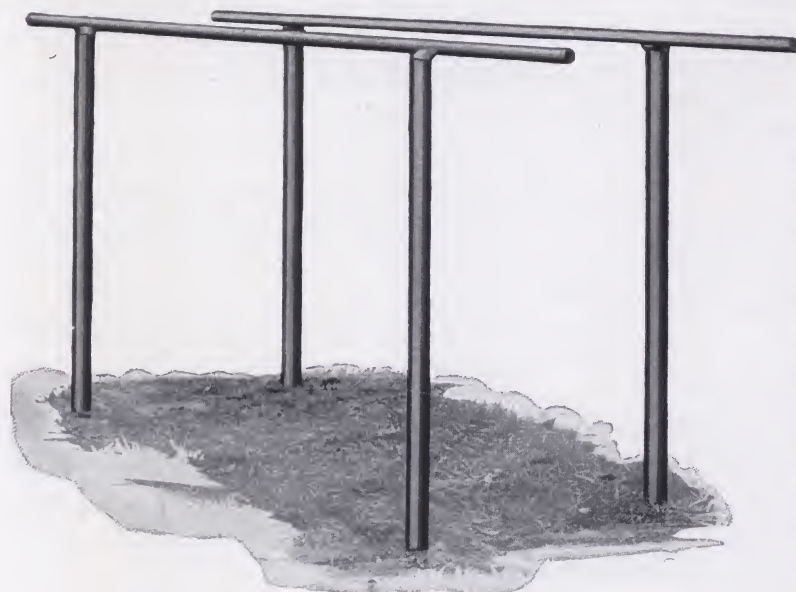
One man should make installation in three hours.

Both types are furnished with solid cold rolled steel "bar" six feet long and with galvanized malleable adjustable fittings, base flanges and top finish caps furnished.

Height, 8 feet; both members set in concrete.

No. 274—Code—LOETZ—Complete, with 3-inch uprights, no braces, weight about.....200 lbs.

No. 275—Code—LOEVB—With 2-inch uprights with braces, weight about.....210 lbs.



Parallel Bars

ALTHOUGH a simple piece of apparatus, it is unusually well made. It is permanently set in concrete and will give years of service without additional expense. No playground is complete without one or more. This piece is quite popular. The bars are of round cold rolled steel, 10 feet in length, finished smoothly, 1⅜ inches in diameter, supported by 2-inch pipe uprights. The entire apparatus is galvanized; base flange anchors included in price; sold complete with pipe, only one size and style.

Space required for use, 6 by 18 feet.

The only difference between No. 260 and No. 261 is that No. 261 is adjustable to height and No. 260 is not.

No. 260—Code—LODAH—Complete as shown, shipping weight about.....230 lbs.

No. 261—Code—LODHA—Complete as shown, shipping weight about.....265 lbs.

See Price List and Discount for Catalog No. 13

See page 36 for Home Yard Play Goods



Ideal Small School Set

THESE four pieces were selected from the Fun-Ful line by the department of physical training of the public schools by one of our most progressive states. They were selected and recommended for the use of the small sized school of not more than fifty pupils.

These goods are of the same high quality as used on the playgrounds of our greater cities.

The set consists of one each our Nos. 230 and 231 four-board seesaw outfit; No. 410 slide with rust resisting metal chute bed way; Nos. 221 and 224 Giant Stride; Nos. 313 and 314 three-swing outfits, all standard approved apparatus.

Because of the popularity of this particular selection, its adaptability and convenience to customers in making a selection, we cover the entire set by one catalog number.

As it is possible to produce these complete sets in large numbers, production costs are lowered and selling expense is less. We offer the complete set as here illus-

trated, at a considerable saving to the buyer. Please bear in mind that these are standard, approved goods, as illustrated and described in detail elsewhere in this catalog. We have not sacrificed quality to favor a lower price; we only offer a greater inducement to buy a complete playground equipment, making it possible for more children to enjoy it and to derive healthful benefit by its use.

Capacity, nineteen children at a time, plus 60 "slides" per minute on the chute.

Our special price on the set includes all frame pipe, galvanized inside and out, rust resisting metal bed way on slide chute, all steel ladders on Giant Stride, and all fittings, parts and pieces necessary for the complete set—ready to install.

This set should not be placed on ground space of less than 3,000 square feet.

Complete installation should require six men eighteen hours.

No. 3000—Code—MIFUD—Complete with pipe, shipping weight about.....1,895 lbs.
(Apparatus, weight 1,090 lbs.; pipe, weight 805 lbs.)

See Price List and Discount for Catalog No. 13
See page 37 for Swimming Pool Equipment



Playground Set

A SIX piece set that has been selected by the greatest authority on playground outfitting—Mr. O. W. Douglas.

Selected for the convenience of those not familiar with playground requirements and for the average newly established play centers.

In consideration of cost of apparatus and ground space required, this is exceptionally well selected. Taken from a capacity standpoint, it represents unusual value, as, to accommodate more children successfully, much more expensive equipment would be necessary on equal space.

No less than 5,900 square feet should be considered for the safe and satisfactory use of this set.

The set consists of one each our Nos. 230-231 Four-board Seesaw; No. 410 Slide with Armco iron bed way; No. 221-224 Eight Ladder Giant Stride with metal ladders; No. 310-311 Six-Swing outfit; No. 201 Ocean Wave; No. 450 Large Single Slide with Armco iron bed way.

Labor hours for installation may be determined by adding hours required for each piece as given.

All of these are illustrated and described separately elsewhere in this catalog.

This method of selling complete playground outfits in sets has proven quite popular and has made possible lower selling expense and manufacturing cost, of which we give our customers the benefit. It must not be overlooked that all apparatus included here is of standard approved quality, just the same as used by a majority of parks and playgrounds of our greater cities. We manufacture one grade, of best quality only.

Our special price on this set includes galvanized frame pipe, Armco iron bed way on the slides, metal Giant Stride ladders galvanized, everything complete ready to install. This is shipped complete all in one shipment and avoids delay, anxiety, trouble and unnecessary expense on the part of the customer; truly the modern way of buying play equipment.

This represents unusual value and quality that cannot be equaled.

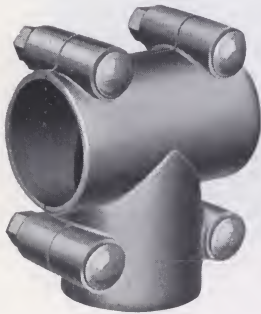
No. 5900—Code—MIMGA—Complete with pipe, weight about4,020 lbs.
(Apparatus weight, 3,000 lbs.; pipe weight, 1,020 lbs.)

*See Price List and Discount for Catalog No. 13
See page 62 for recreation illumination equipment*

Split Clamp

THE Split Clamp Type Fittings are superior to any ever used in the industry for this purpose. This method makes possible one hundred per cent gripping contact with the pipe wall.

Distortion of pipe is impossible and therefore continuous relationship of pipe and fitting is maintained. These fittings are particularly adaptable for use with galvanized pipe because there are no point contacts that soon loosen as is the case with other types. Ordinary types mutilate, distort or collapse the pipe, causing them to become loose and dangerous as well as making them difficult to remove or reassemble. Our fittings make one hundred per cent contact without harm, whereas other styles represent only two to fifty per cent.



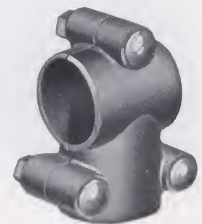
No. F-22
Single Tee, for 3-inch horizontal and 3-inch vertical pipe.
Weight, 10 lbs., 12 oz.



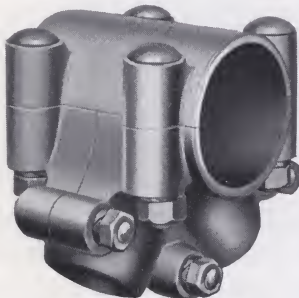
No. F-26
Single Tee, for 3-inch horizontal and 2-inch vertical pipe.
Weight, 9 lbs., 4 oz.



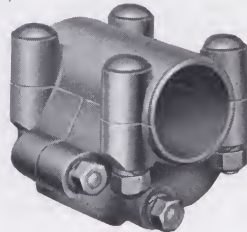
No. F-28
Single Tee, for 2-inch horizontal and 3-inch vertical pipe.
Weight, 9 lbs.



No. F-24
Single Tee, for 2-inch horizontal and 2-inch vertical pipe.
Weight, 4 lbs.



No. F-14
Two-way center spread for 3-inch horizontal and 2-inch support pipe.
Weight, 14 lbs., 12 oz.
Three-way end spread consists of No. F-30 single end spread and No. F-14 two-way end spread for 3-inch horizontal and three 2-inch angling supports.
Weight, 22 lbs., 4 oz.



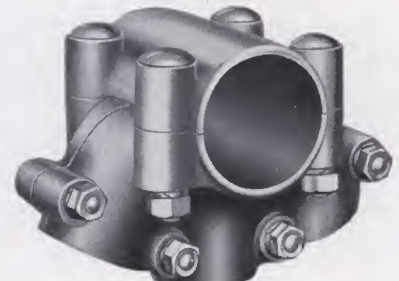
No. F-15
Two-way center spread for 2-inch horizontal and 2-inch support pipes.

No. F-16
Two-way center spread for 2-inch horizontal and 1 1/4-inch support pipe.
Weight, 8 lbs., 4 oz.

No. F-18
Two-way center spread for 2-inch horizontal and 1 1/2-inch support pipes.
Weight, 8 lbs., 4 oz.

Three-way end spread consists of No. F-32 single end spread and No. F-18 two-way center spread for 2-inch horizontal and three 1 1/2-inch angling supports. Weight, 12 lbs., 12 oz.

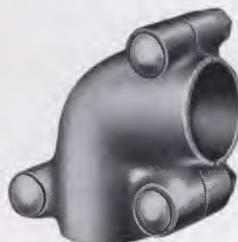
Three-way end spread consists of No. F-16 two-way center spread and No. F-34 single end spread for 2-inch horizontal and three 1 1/4-inch angling supports. Weight, 12 lbs., 4 oz.



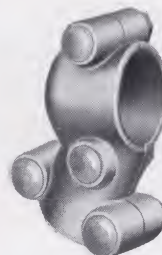
No. F-20
Three-way and center spread for 3-inch horizontal and 2-inch support pipe.
Weight, 16 lbs., 7 oz.



No. F-10
Three-inch Single Ell for 3-inch horizontal and 3-inch vertical pipe.
Weight, 13 lbs., 4 oz.



No. F-12
Two-inch Single Ell for 2-inch horizontal and 2-inch vertical pipe.
Weight, 5 lbs.



No. F-34
Single end spread for 2-inch horizontal and 1 1/4-inch support pipe.
Weight, 4 lbs.



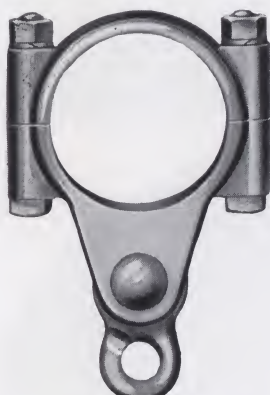
No. F-30
Single end spread for 3-inch horizontal and 2-inch support pipe.
Weight, 7 lbs., 8 oz.

No. F-32
Single end spread for 2-inch horizontal and 1 1/2-inch support pipe.
Weight, 4 lbs., 8 oz.

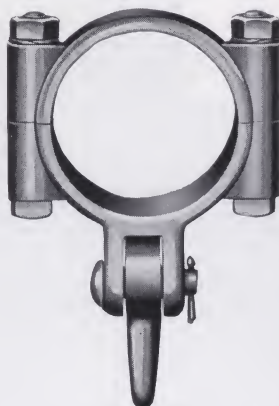
See Price List and Discount for Catalog No. 13
See page 37 for Swimming Pool Equipment

Type Fittings

THREADED or drilled pipe not used with these fittings. In order to gain utmost contact area with pipe walls, our fittings are made with thin skirts that with pressure conform closely to the pipe. This feature, however, does not lessen the strength of the fitting because of special design and extra heavy bolt lugs. Bolts of exceptional size and quality hot-forged, low carbon and machine cut threads. Hot punched hexagon nuts are used with heaviest lock washers. Bolts, nuts and washers are galvanized. The generous use of large bolts and heavy lugs makes possible a tremendous uniform constant gripping pressure throughout contact area in a positive manner that does not cause altering or collapsing of the pipe and will not become loose after being properly tightened. These fittings are of the best quality malleable iron and hot galvanized. They are most convenient in assemblage and are safe, strong and positive, being best type known to modern mechanics for structural purposes.



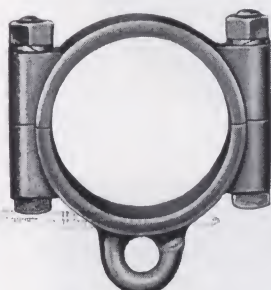
No. F-159
Complete Ball-bearing clamp for flying rings, trapeze and swings, 3-inch pipe.
Weight, 4 lbs.



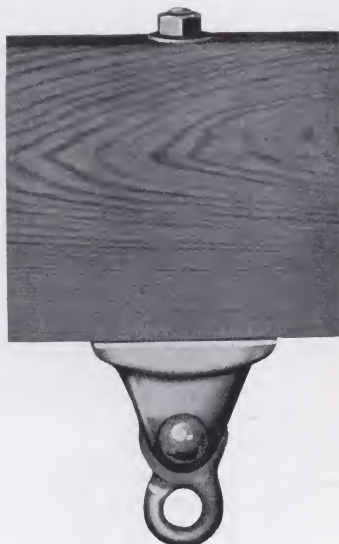
No. F-161
Clamp used with traveling ring for 3-inch pipe.
Weight, 4 lbs.
No. F-296
Clamp used with traveling ring for 2-inch pipe.
Weight, 2 lbs., 11 oz.



No. F-159A
Complete Ball-bearing clamp for flying rings, trapeze and swings, 2-inch pipe.
Weight, 2 lbs., 11 oz.



No. F-162
Complete plain - bearing clamp for flexible ladders and climbing pole for 3-inch pipe.
Weight, 2 lbs., 12 oz.



No. F-160
Ball-bearing hanger used with wood frame swing sets.
Weight, 2 lbs., 14 oz.
When ordering give thickness of timber.



No. F-36
1 1/4-inch straight base flange.
Weight, 1 lb., 12 oz.

No. F-170
1 1/2-inch straight base flange.
Weight, 2 lbs.

No. F-171
2-inch straight base flange.
Weight, 5 lbs.

No. F-172
2 1/2-inch straight base flange.
Weight, 6 lbs.

No. F-173
3-inch straight base flange.
Weight, 8 lbs.

No. F-174
4-inch straight base flange.
Weight, 12 lbs.

No. F-175
5-inch straight base flange.
Weight, 22 lbs., 4 oz.



No. F-388
Complete guard rail for vertical ladder and sliding poles, 3-inch horizontal and 2-inch and 1 1/2-inch vertical pipe.
Weight, 18 lbs.

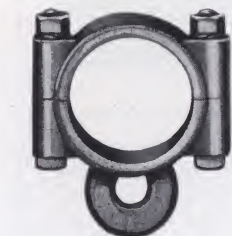


No. F-237
Three-inch finish plug.
Weight, 4 lbs.

No. F-238
Two-inch finish plug.
Weight, 1 lb., 4 oz.

No. F-372
One and one-half inch finish plug.
Weight, 8 oz.

No. F-508
One and one-fourth inch finish plug.
Weight, 6 oz.



No. F-162X
Complete plain - bearing clamp for flexible ladders and climbing pole for 2-inch pipe.
Weight, 1 lb., 12 oz.

See Price List and Discount for Catalog No. 13

See page 36 for Home Yard Play Goods

HILLITE

FLOOD LIGHT PROJECTOR

WITH the advent of outdoor night games and sports, we established a department for the creation, development, and manufacture of recreation illumination equipment.

In addition we maintain a staff of lighting engineers whose services are available for our customers. We are prepared to engineer and supply equipment for every form of outdoor sport, game, or recreation that takes place throughout the four seasons.



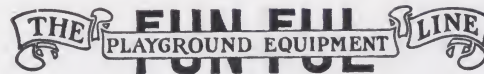
Proper illumination of outdoor recreation places makes possible from 40-90 percent greater patronage, thus adding tremendously to the value of such enterprises.



Special literature is available for those interested in equipment and any other information desired concerning recreation illumination may be had without obligation.

Recreation Lighting Division

HILL-STANDARD Co.
EST. 1900
Anderson, Indiana, U.S.A.



Approximate

Material, Labor and Number of Men Required for Assembly and Installation of Fun-Ful Equipment.

Catalog Page	Equipment	Fixed or Portable	Sacks Cement	Cu. Yds. Gravel	Total Hours	Number of Men
5	227 Cycle Stride	F	2	1/2	10	2
7	220-1 Giant Stride	F	2	1/2	5	2
9	201 Ocean Wave	F	2	1/2	10	2
11	215 Merry-Go-Round	F	3	3/4	10	2
12	212-13 Merry-Go-Round	F	3	3/4	8	1
13	262 Revolving Par. Bar.....	F	3	3/4	8	2
14	471 Calumet Coaster	F	2	1/2	10	5
15	470 Double Coaster	F	3	1/2	10	5
16	430 New Chicago Slide.....	F	1	1/4	8	3
17	410 F-F Special Slide.....	P			1	2
18	440 F-F Coaster	P			2	2
19	450 Large Single Coaster.....	F	2	1/2	4	3
20	487 Tunnel Slide	F	2	1/2	4	3
21	247 Travelarc	F	2	1 1/2	5	2
22	484 Spiral Slide	F	4	1	4	6
25	490 Cellar Door Slide.....	F	3	1/2	6	4
26	290-1 Barrel of Fun.....	F	1	1/4	4	1
27	238 Single Seesaw	P	---	---	1	1
27	237 Single Seesaw	F	1	1/4	2	1
28	233 Two Board Seesaw.....	F	1	1/4	2	1
29	230 4-Board Seesaw Set.....	F	1	1/4	5	1
29	235 3-Board Seesaw Set.....	F	1	1/4	5	1
30	250 Horizontal Ladder	F	1 1/2	1/2	5	2
31	253 Horizontal Ladder-Stallbars	F	1 1/2	1/2	5	2
32	295 Circular Tr. Ring.....	F	2	1/2	10	2
33	301-2-3 Line Traveling Ring Outfit.....	F	3	1	16	4
34	106 All Metal Tennis Outfit.....	F	4	1	14	2
35	2500 Shelter Shed	F	12	6	32	4
38	364 Combination	F	7	3 1/2	8	1
39	375 Combination	F	4	1	25	5
40	380 Combination	F	5	1 1/2	30	5
41	385 Combination	F	8	2	50	5
42	367 Combination	F	1 1/2	1/8	5	2
43	389 Combination	F	4	1	15	3
44	370 Combination	F	3	1/2	10	3
45	373 Combination	F	1 1/2	1/8	8	1
46	340 Combination	F	1 1/2	1/8	5	1
46	345 Combination	F	1 1/2	1/8	4	2
47	350 Combination	F	1 1/2	1/8	4	2
47	355 Combination	F	2	1/2	7	2
48	330-B Baby Scup	F	1 1/2	1/8	5	2
49	337 Chair Swing	F	1 1/2	1/8	5	2
50	313 Standard Three-Swing Outfit.....	F	2	1/2	6	2
50	313-B Three-Swing Outfit	F	1 1/2	1/8	5	2
51	310 Standard Six-Swing Outfit.....	F	3	1	8	2
51	327 Four-Swing Outfit	F	3	1	8	2
52	280 Basket Ball Backstop	F	2	1/2	6	2
53	245 Tree Climb	F	1/2	1/2	3	2
55	2000 Park Swing	F	1 1/2	1/8	4	2
56	271 Jump Standards	F	1	1/4	2	1
57	260 Parallel Bars	F	2	1/8	4	2
58	3000 School Set	P & F	5	1 1/2	18	6
59	5900 Playground Set	P & F	10	3	41	14

The work of assembly and installation of Fun-Ful apparatus requires only ordinary mechanical skill.

All apparatus should be set level regardless of the ground contour.

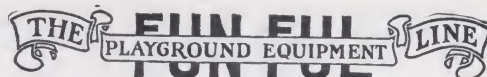
Vertical supports should be absolutely perpendicular, a thing not difficult to attain with square and level or plum bob. The correct angle of the slanting supports and braces is in most cases determined by their fittings.

Apparatus that is set in concrete should be protected until concrete has had ample time to harden. Every means should be employed to prevent children or anyone else from moving frames or supports while cement is in plastic state, otherwise, the purpose of the concrete is defeated.

All equipment should be carefully inspected; every screw, nut and bolt tried in order to know for an absolute certainty that everything is in perfect order.

All apparatus should be regularly inspected by some competent person. We make Fun-Ful equipment with the very best material and workmanship and give particular attention to lubrication and weather protection, but like all other things subject to wear and the action of the elements, every care given will add materially to the general good service and satisfaction.

"IT PAYS TO PLAY"



Description of Individual Apparatus

CHUTES

No. 451—Code—LUCKT	—30-foot wave type chute, only, with fittings, as used on No. 450 slide, weight about	540 lbs.
No. 456—Code—LUEVG	—30-foot straight type chute, only, with fittings as used on No. 455 slide, weight about	540 lbs.
No. 461—Code—LUFOR	—24-foot straight type chute, only, with fittings as used on No. 460 slide, weight about	430 lbs.
No. 442—Code—LUDYS	—20-foot wave type chute, only, with fittings, as used on No. 447 slide, weight about	360 lbs.
No. 443—Code—LUDUR	—20-foot straight type chute, only, with fittings as used on No. 446 slide, weight about	360 lbs.
No. 441—Code—LUCYR	—16-foot wave type chute, only, with fittings, as used on Nos. 415, 435 and 440 slide, weight about	220 lbs.
No. 421—Code—LUAKS	—16-foot straight type chute, only, with fittings, as used on Nos. 410, 430 and 445 slide, weight about	220 lbs.
No. 4000—Code—MIHUG	—30-foot straight type all-metal chute only, with fittings as used on Nos. 458, 482 slides, weight about	655 lbs.
No. 4350—Code—MIJIF	—30-foot wave type all-metal chute only with fittings, weight about	665 lbs.
No. 4050—Code—MIHYH	—24-foot straight type all-metal chute only, with fittings, as used on No. 462 slide, weight about	475 lbs.
No. 4300—Code—MIJGO	—24-foot wave type all-metal chute only, with fittings, weight about	485 lbs.
No. 4100—Code—MIJAC	—20-foot straight type all-metal chute only, with fittings, as used on No. 449 slide, weight about	400 lbs.
No. 4250—Code—MIJED	—20-foot wave type all-metal chute only, with fittings, weight about	410 lbs.
No. 4150—Code—MIJCA	—16-foot straight type all-metal chute only, with fittings, as used on Nos. 445, 448 slides, weight about	320 lbs.
No. 4200—Code—MIJDE	—16-foot wave type, all-metal chute only, with fittings, weight about	330 lbs.

OCEAN WAVE PARTS

No. 205—Code—LIUZD	—Head and socket, only, weight about	75 lbs.
No. 206—Code—LIVAT	—Outer circle, only, weight about	275 lbs.
No. 207—Code—LIVEV	—Rods, only (10), weight about	115 lbs.
No. 208—Code—LIVOY	—Secondary circle, only, weight about	170 lbs.
No. 209—Code—LIVTA	—Pipe, only, weight about	250 lbs.
No. 210—Code—LIV0Z	—Guard, only, weight about	40 lbs.
No. 211—Code—LIVVE	—Bumper Ring, only, weight about	17 lbs.

SEESAW BOARDS AND PARTS

No. 246—Code—LOBFA	—Board with fittings, only, each, weight about	75 lbs.
No. 247—Code—LOBGE	—Notched fittings, only, 2 required for each board, each, weight about	31½ lbs.
No. 248—Code—LOBJO	—Handles, only, each, weight about	21½ lbs.
No. 249—Code—LOBLY	—Collars, only, for pipe, each (one required for each board), weight about	3 lbs.

HORIZONTAL BARS

No. 268—Code—LODYN	—Bar with either pin or hinged clamp fittings for 2-inch pipe, each, weight about	25 lbs.
No. 269—Code—LOECH	—Bar with either pin or hinged clamp fittings for 3-inch pipe, each, weight about	25 lbs.

FLYING OR TRAVELING RINGS

No. 306—Code—LOJUR	—Steel tubing with No. S159x or No. S161x ball bearing clamps and chain, each, weight about	7 lbs.
No. 307—Code—LOJYS	—Cast aluminum, with No. S159x or No. S161x ball bearing clamps and chain, each, weight about	7¼ lbs.

STANDARD SWINGS

No. 308—Code—LOKAN	—Complete with ball bearing clamps, each, weight about	28 lbs.
No. 309—Code—LOKEP	—Without clamps, each, weight about	20 lbs.

CHAIR SWINGS

No. 324—Code—LOMER	—Complete with ball bearing fittings, weight about	20¼ lbs.
No. 325—Code—LOMRE	—Complete with No. S162x fittings, weight about	18 lbs.

BABY SCUPS

No. 334—Code—LONVO	—Complete with ball bearing fittings, weight about	15½ lbs.
No. 335—Code—LONYX	—Complete with No. S162x fittings, weight about	13 lbs.

TRAPEZE

No. 358—Code—LORWE	—Complete with chain and ball bearing clamps, each, weight about	15 lbs.
No. 359—Code—LORZO	—Without clamps, each, weight about	7 lbs.

STEEL TEETER LADDER

No. 329—Code—LONAR	—With fittings, each, weight about	85 lbs.
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FLEXIBLE LADDER

No. 378—Code—LOUSC	—Complete with clamps and anchors, each, weight about	18½ lbs.
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CLIMBING POLE

No. 379—Code—LOVAZ	—Complete with clamps and anchors, each, weight about	35 lbs.
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VERTICAL STEEL LADDER

No. 383—Code—LOVGY	—16-foot long with anchors, each, used with sliding poles on combinations, weight about	125 lbs.
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STEEL SLIDING POLES (GALVANIZED)

No. 384—Code—LOVIC	—20 feet long with anchors, per pair, weight about	160 lbs.
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GUARD RAILS FOR VERTICAL LADDER AND SLIDING POLES

No. 388—Code—LOVZA	—With fittings, per pair, weight about	25 lbs.
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See Price List and Discount for Catalog No. 13



THE HILL HILL
PLAYGROUND EQUIPMENT LINE

HILL-STANDARD